Aalto University
School of Engineering

Challenges and Special Characteristics of Valuing Care Properties – Valuer's Perspective

Master's Thesis
Department of Built Environment
School of Engineering
Aalto University

Espoo, July 2020

Bachelor of Science Sanna-Maria Tikkanen

Supervisor: Professor Kauko Viitanen
Instructor: M. Sc. Henri Timperi

Aalto University
School of Engineering

Aalto University, P.O. BOX 11000, 00076
AALTO
www.aalto.fi

Abstract of master's thesis

Author Sanna-Maria Tikkanen

Title of thesis Challenges and special characteristics of valuing care properties – valuer's perspective

Master programme Real Estate Economics **Code** ENG24

Thesis supervisor Professor Kauko Viitanen

Thesis advisor Master of Science Henri Timperi

Date 28 July 2020 **Number of pages** 77 + 1 **Language** English

Abstract

Care properties compose a diverse submarket of their own in the Finnish property markets and have established their position as a property investment class. Thus far, the amount of research on care property markets has been limited. The purpose of this study is to create an overview on Finnish care property markets, explain its special characteristics, and to explore what must be taken into consideration when valuing care properties.

The research has mainly been conducted by reviewing publications on care property markets and authorative regulation and by executing ten thematic interviews. Since the perspective of the thesis is that of a property valuer's, all the respondents chosen for the interviews are authorized property valuers with experience on care property valuation.

Care property market has some distinctive features in the commercial property markets. Care service provision is subject to license, and both the services and the facilities used in service provision are regulated by authorities. Hence, the entanglement of care service provision and the properties in which the services are delivered, is strong. Care property market is not only a very diverse segment addressing various target groups with different needs, but also quite young and the volumes relatively low compared to other commercial properties. Regardless of the considerable investor interest in care properties, local authorities are also in a major role in care property markets as users and owners of care properties. Furthermore, care property development is not as such dependent on economic cycles, whereas demographic development and urbanization contribute more to it.

Authorative regulation is the most significant factor to be accounted for in care property valuation, as it has considerable impact not only on the valuation but also on the value. However, regarding valuation theories and methods, valuing care properties follows the same principles as that of other commercial property types. As the authorative regulation largely determines whether or not the facilities can be employed in care service provision, changes in regulation also subject care properties to more rapid obsolescence. Regulation pertaining to care property valuation presents one interesting subject for further research.

Keywords care property, healthcare property, care property market, valuation, appraisal

Aalto-yliopisto
Insinööritieteiden korkeakoulu

Aalto-yliopisto, PL 11000, 00076 AALTO
www.aalto.fi

Diplomityön tiivistelmä

Tekijä Sanna-Maria Tikkanen

Työn nimi Hoivakiinteistöjen arvioinnin haasteet ja erityispiirteet - arvioijan näkökulma

Maisteriohjelma Kiinteistötalous **Koodi** ENG24

Työn valvoja Professori Kauko Viitanen

Työn ohjaaja Diplomi-insinööri Henri Timperi

Päivämäärä 28.7.2020 **Sivumäärä** 77 + 1 **Kieli** englanti

Tiivistelmä

Hoivakiinteistöt muodostavat oman, monimuotoisen alamarkkinansa Suomen kiinteistömarkkinoilla, joka on vakiinnuttanut asemansa kiinteistösijoitusmarkkinassa. Toistaiseksi hoivamarkkinoita koskeva tutkimus on ollut hyvin vähäistä. Tämän tutkimuksen tarkoituksena on luoda yleiskatsaus suomalaiseen hoivakiinteistömarkkinaan, selvittää sen erityispiirteitä, sekä tutkia, mitä hoivakiinteistöjä arvioitaessa on otettava huomioon.

Tutkimus on toteutettu pääasiassa tutkimalla hoivamarkkinoita ja viranomaismääräyksiä käsitteleviä julkaisuja sekä toteuttamalla kymmenen teemahaastattelua. Koska tutkimuksen näkökulma on kiinteistöarvioijan, haastateltaviksi valittiin kymmenen auktorisoitua kiinteistöarvioijaa, joilla on kokemusta hoivakiinteistöjen arvioinnista.

Hoivakiinteistömarkkinasta on tunnistettavissa erityispiirteitä, jotka erottavat sen muista toimitilamarkkinoista. Hoivapalvelut ovat luvanvaraista toimintaa ja paitsi hoivapalveluita, myös toimitilojen soveltuvuutta palveluntuotantoon säädellään viranomaisvaatimuksin. Tästä johtuen hoivapalveluiden ja niiden tuottamisessa käytettyjen kiinteistöjen kytkös on tiivis. Hoivakiinteistömarkkina on paitsi hyvin laajakirjoinen segmentti, käsittäen tiloja lukuisille kohderyhmille erilaisine tarpeineen, myös verraten nuori markkina ja sen volyymit melko alhaisia suhteessa muihin toimitilatyyppeihin. Huolimatta hoivakiinteistöihin kohdistuvasta sijoittajakiinnostuksesta, myös kuntasektori on hoivakiinteistömarkkinoilla merkittävässä roolissa sekä hoivakiinteistöjen käyttäjinä että omistajina. Lisäksi hoivakiinteistöjen kysynnälle on ominaista, ettei se ole niinkään riippuvainen taloudellisista sykleistä, vaan demografiset tekijät ja urbanisaatio ovat kysynnän ajureina merkittävämpiä.

Viranomaisvaatimukset ovat merkittävin huomioonotettava tekijä hoivakiinteistöjä arvioitaessa ja niillä on suuri vaikutus niin arviointiin kuin arvoonkin, mutta arviointiteorioiden ja -menetelmien osalta hoivakiinteistöjen arviointi noudattaa samoja periaatteita kuin muidenkin toimitilatyyppien. Koska viranomaismääräykset määrittävät pitkälti sen, voiko kiinteistöä käyttää hoivapalveluiden tuottamiseen, muutokset säätelyssä altistavat hoivakiinteistöt myös tavallista nopeammalle vanhenemiselle. Hoivakiinteistöihin liittyvä sääntely muodostaakin yhden mielenkiintoisen jatkotutkimuskohteen.

Avainsanat hoivakiinteistö, hoivamarkkina, kiinteistöarviointi

Acknowledgements

This thesis has been done for Realia Management and it completes my studies at Aalto University School of Engineering. I want to express my gratitude to Realia Management for the opportunity to write my thesis on a topic of personal interest.

I want to thank my instructor Henri Timperi for his support and guidance throughout the research process. Furthermore, my supervisor Kauko Viitanen deserves a special acknowledgement for his valuable remarks, comments and advice.

I want to express my sincerest gratitude to all the interviewees, who provided me with their expertise and gave their valuable time for my research. Your contribution to this project has been crucial.

Finally, to my family; to my husband Tommi, who never stopped believing in me, my heartfelt thanks. Your support made it possible. To my children Niilo and Hilla: Mom has finally finished writing it.

In Helsinki, 28 July 2020

Sanna-Maria Tikkanen

Contents

List of figures

List of tables

1 Introduction

1.1 Background

The Finnish property investment market has undergone noticeable structural changes over the past years. Albeit office and retail properties are still popular among investors, other sectors, such as residential and public use properties, have increased their share of the investment market due to their stronger investment performance. Public use properties include properties from normal office properties to large hospital buildings and serviced housing properties. Of public use properties, healthcare properties that have traditionally been owned by municipalities and other public sector organizations, have rapidly increased their transaction volume in the investment market. (KTI 2020b.) According to KTI Property Information Ltd (KTI) estimates, at the end of 2019 the market value of care properties owned by private investors reached €3,600 million. 2019 was a strong year for healthcare properties, as the transaction volume yielded €660 million reaching almost the record level of year 2018, when healthcare properties transacted worth €680 million. Proportionally the share of healthcare properties in 2019 amounted to some 10.4 per cent of the total commercial property transaction volume. (KTI 2019; KTI 2020b.)

As a market sector, healthcare properties are a diverse segment addressing a number of different target groups including small children, elderly people, mental patients and disabled people, to mention some. Properties that fall into the category of care include, for example, nursing homes, day care centers and hospitals. Furthermore, most of these facilities have traditionally been publicly owned and even though municipalities and the state of Finland continue to be the predominant owners of healthcare properties, private investor investments have increased significantly over the past years. (KTI 2019, p. 63.) One significant characteristic of the healthcare property sector is the amount of regulation that follows in some fields. Moreover, providing care services in a certain facility is subject to license. (KTI 2019; Ministry of the Environment 2011.)

Statistics Finland (2019a) estimates the healthcare property stock to be approximately 13.2 million sq m in over 9,200 buildings. The gross floor area has increased by approximately 25 per cent and the number of healthcare property buildings by 14 per cent compared with the statistics of 2010. It should be noted that these figures by Statistics Finland only cover healthcare properties for institutional care, such as healthcare buildings, social work activity buildings and prison buildings, but exclude dwellings for special groups intended for continuous residential use. In addition, educational buildings are a category of their own and thus, children's day care centers that fall into the category of early childhood education, are not included in the healthcare property stock. (Statistics Finland 2019c.)

While the definitions for healthcare properties by KTI and Statistics Finland are not identical, the way in which healthcare properties are defined in academic literature also vary. For example, Newell and Marzuki (2018) approach the healthcare context through primary, secondary and tertiary care. Although health centers, care homes and hospitals are classified as healthcare properties, Newell and Marzuki consider childcare properties to be a property type among alternate properties. Like Newell and Marzuki (2018), also van Elp et al (2018) present the first, second and third line care, but further subdivide care into four different categories: residential

health care properties, properties with a healthcare function, social service delivery, and private institutions. In this thesis, the term "care property" is employed to cover all properties that serve in the provision of social welfare and healthcare services in Finland.

The major driver behind the space demand for care properties originates from the demographics. The rapid aging of the population in Finland continues, advanced by improved life expectancy and particularly the survival beyond 65 years. By the end of 2019, people aged 65 years or more constituted 22 per cent of the entire Finnish population of 5.5 million, and people aged 85 years and over, 2.7 per cent (Statistics Finland 2020b). In 2030 the estimated number of people aged 65 and over is approximately 1.46 million, equalling over 26 per cent of the population, and for the number of persons aged over 85 years, the figures are projected at 216,000 and 3.9 per cent (Statistics Finland 2019b). The elderly is the largest individual group in need of residential care and the majority of care properties are for elderly care. In addition, the birth rate is showing a declining trend, contributing to the decreased demand for properties employed in early childhood education. However, regional variations in this respect are significant.

Property valuation is a process in which the value of an asset is appraised to its market value. The demand for valuations is derived demand originating from for example regulatory compliance, or from the need to support secured lending and transactional activity (IVSC 2017, p.1). Market values, estimated by valuers, are based on information attained from the property market that is by nature imperfect and heterogenous. Market values are professional estimates of what the property is expected to transact for at a given value date. However, as is generally recognised, all valuations have degree of uncertainty in them, and the opinion on the market value is formulated on the assumptions adopted and assessed by the valuer. (Mallinson & French 2000; Brown et al 1998.) In care property valuation, the young age of the market, developing market practices and the strong impact of regulation influence the valuation.

Although a search in Harald Herlin Learning Center's Aaltodoc database produces several hits for "care property", "healthcare property" and the Finnish word "hoiva", there is a limited amount of research conducted on Finnish care property market. Laura Korhonen conducted a study in 2016 on care homes with a focus on private care properties as investments objects, and Alex Ventin researched the productization of school and day-care service network surveys. Besides those two, there appears to be no additional studies on care properties that would fall into the discipline of real estate. However, the number of care property transactions and the capital invested in care properties is considerable. Hence the need to explore the methods and practices by which they are appraised, in addition to the challenges and special features care properties possess with respect to more conventional ones, is evident.

1.2 Purpose of the Study and Research Questions

This study aims is to produce an overview of the Finnish care property market and its operation environment, and to exemplify the multidimensional nature of the care property segment. The study aspires to address the difficulties and challenges that valuers meet while appraising care properties, to detect the factors contributing to these adverse elements, and to examine how the valuers resolve the issues that may impede the valuation process of care properties.

The thesis strives to answer the following research questions:

1. What are the typical characteristics of care property market?
2. What are the special features of care properties that differs them from other properties from valuer's point of view?
3. What are the greatest challenges in valuing care properties and how are these challenges overcome?

The first research question examines the features and characteristics of the Finnish care property market. The following two research questions focus on the valuation of care properties and the potential difficulties valuers meet when valuing care properties.

1.3 Scope of the Research

The main focus of this thesis is on how the property valuers perceive care properties. To support this objective, the study aims to produce an overview of the Finnish care property markets and its operation environment. Care properties comprise a wide variety of different properties to provide for several target groups, and this study aims to examine the care property market to its full extent regarding different facility types and the existing target groups that use these facilities.

The care property types covered in this study comprise sheltered homes, nursing homes, hospices, hospitals, health care centers, child caring institutions, children's day care centers, mother-and-child-homes and shelters. The target groups include the elderly, people with disabilities, the terminally ill, mentally handicapped, memory loss patients, mental health rehabilitees, substance abuse rehabilitees, patients of primary healthcare and hospital services, children in early childhood education, child protection customers, mothers-to-be, new mothers with children and victims of domestic violence.

The scope of the research covers both publicly and privately owned care properties. Correspondingly, care property operators can be either public, non-profit or private organizations. It should be noted that prisons and educational facilities such as schools and universities are excluded from the scope of the research. The study is geographically restricted to the Finnish care property market.

1.4 Methods and Data

The thesis consists of a theoretical and an empirical section. The theoretical section of the study comprises a literature review on Finnish care property markets and real estate valuation theory. Since the Finnish care property market has so far been a subject of only limited research, the literature applied to cover the care property markets comprises mainly publications by Finnish authorities, organizations operating in the field of social welfare and healthcare, and instances delivering social welfare and healthcare services.

The literature employed by Korhonen (2016) for her thesis on care home investments provided a useful starting point for an expanded search for material on other care property types and the relevant authorities. A considerable part of the search for the literature and references for this

thesis took place in the internet, where search words such as “care”, “healthcare”, “marketization”, “social welfare”, “early childhood education”, “daycare”, “social welfare and healthcare reform”, “hoiva”, “hoivamarkkina”, “päiväkoti”, “varhaiskasvatus”, “sote” and sosiaali- ja terveyspalvelut” were applied. Furthermore, the references in the discovered articles and publications proved useful in finding additional material for the purposes of this study. Publications and databases of Statistics Finland were used to describe the stock of Finnish care properties. Also the information on population and demographics in Finland trace back to information produced by Statistics Finland.

Publications by KTI Property Information Ltd assisted in presenting a general view on Finnish property markets and how care properties are positioned on them. KTI Online, a web-based application providing market information, was used in illustrating total transaction volumes and care property transaction volumes in Finland.

Contrary to information on Finnish care property markets, information on property valuation is available in abundance. The primary sources for the valuation theory part of the thesis were Aalto University Learning Center’s collections and the Learning Center’s database for international articles. The search for property valuation theory literature was executed by using search words such as “property valuation”, “property valuation methods”, “property valuation bias” and “valuation uncertainty”.

The empirical part of the research is executed as thematic interviews. In thematic interviews, the topics of interest are predetermined, but the questions are not clearly defined nor sequenced. Instead, the interviewer may have a list of chosen themes to ensure they are all covered during interviews. Due to the nature of the interview type, the order of execution and the elaboration of the responses vary depending on the interviewee. (Eskola & Suoranta 2003.) Thematic interviews are considered a good fit for studying phenomena that are relatively unknown; it targets particular themes and allows the interviewees to express their thoughts, interpretations and views without the restraints that are imposed by more structured interview types (Saaranen-Kauppinen & Puusniekka 2006). The interviewees for this study include 10 property valuers from six companies with valuation experience ranging from four to over 30 years.

1.5 Structure of the Work

The research constitutes of six chapters that are presented briefly in Figure 1. The first chapter of the thesis introduces the research problem, scope and outline of the study, and the research methods applied in the research. The purpose of the first chapter is to provide the reader with the necessary background information on the research topic and present the motivation for the study.

Chapter two is a description of the Finnish care property markets. The objective of the second chapter is to generate an overview of the Finnish care property markets. Together with Chapter three, which discusses the theories of property valuation and valuation methods, it forms the theoretical framework for the study. Covering property valuation theory is necessary for the purposes of this study as the viewpoint of the thesis is that of the property valuer.

Chapters four and five comprise the empirical part of the research. Chapter four presents the empirical research of the study, commencing with a description of thematic interviews as a research method and followed by the interview sample employed in this study. Chapter four concludes with a description of the research strategy and methods of analysis. The objective of the thematic interviews was to collect information on how care properties as subject of valuation differ from other property types, what are the potential stumbling blocks in the valuation process, and how these difficulties are overcome. The results of the conducted interviews are presented in Chapter five, including conclusions of the interviews.

The concluding Chapter six presents the results of the study. Furthermore, the quality and reliability of the research are appraised and recommendation for additional research are given.

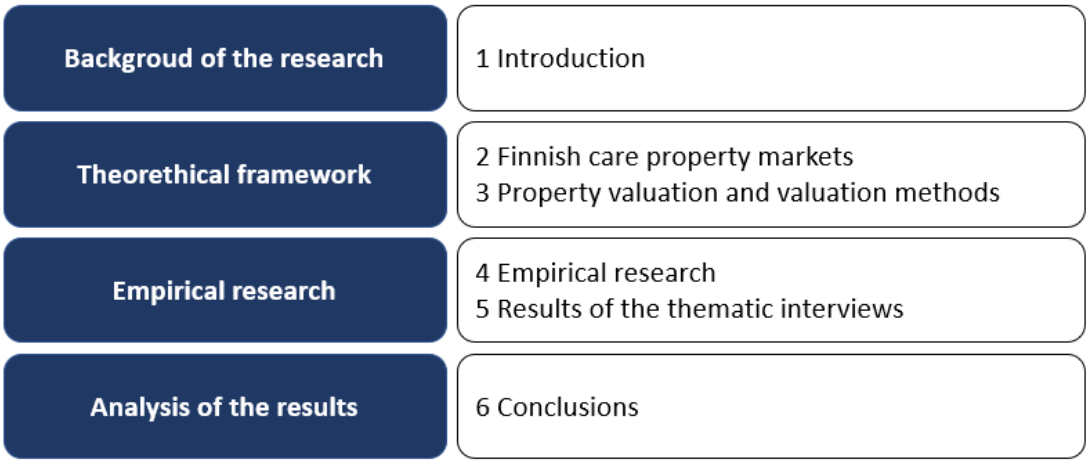

Figure 1. Structure of the thesis.

2 Finnish Care Property Markets

The objective of this Chapter is to provide an overview of the Finnish care property market. After having discussed the Finnish care property investment market, the Chapter reviews the care property stock in Finland. Thereafter the Chapter continues to explain the operating environment of care property markets in Finland by reviewing the role of the municipalities with respect to care sector, how marketisation has affected Finnish social welfare and healthcare service provision, and how state subsidies relates to the topic. Regulation and responsible authorities influencing and governing social welfare and healthcare service provision are dedicated a subchapter of their own, in which also space requirements for some care properties are briefly deliberated. Lastly, the Chapter discusses the drivers behind the demand for care properties.

2.1 Finnish Care Property Investment Market

The Finnish property investment market has undergone noticeable structural changes over the past years. Albeit office and retail properties are still popular among investors, other sectors, such as residential and public use properties, have increased their share of the investment market due to their stronger investment performance. Public use properties include properties from normal office properties to large hospital buildings and serviced housing properties. Of public use properties, healthcare properties that have traditionally been owned by municipalities and other public sector organizations, have rapidly increased their transaction volume in the investment market. (KTI 2020b.)

According to KTI estimates, at the end of 2019 the market value of care properties owned by private investors reached €3,600 million. 2019 was a strong year for healthcare properties, as the transaction volume yielded €660 million reaching almost the record level of year 2018, when healthcare properties transacted worth €680 million. Proportionally the share of healthcare properties in 2019 amounted to some 10.4 per cent of the total commercial property transaction volume. (KTI 2019; KTI 2020b.) Figure 2 illustrates care property transaction volumes in Finland in 2010-2019 and their share of total commercial property transaction volumes that include transactions worth over one million euro made by professional operators.

Amount of private investments in other public use properties is still rather low compared to the total supply of these properties. Private investors own for instance various educational buildings and children's day care centers, but they usually represent single assets in the portfolios. (KTI 2020b.) According to KTI Online (2020), however, care properties are often transacted as portfolios. The transaction prices of single care properties are fairly low (Korhonen 2016, p. 32) but as portfolios they are large enough to attract professional investors.

Finnish property markets have become more international during the past decade and foreign investors have increased their exposure in Finnish care property markets. Also the number of investment funds in care properties has increased. The Swedish Hemsö, which is still the largest foreign investor in the public use property sector (KTI 2020b), was the first foreign investor to enter the Finnish healthcare property market in 2013 and made the first investment in healthcare

properties in 2014. Hemsö was followed by Swedish Hemfosa and German Deka in 2015. (KTI 2016.) Both Hemsö and Hemfosa represent specialised investors that are currently numerous in the Finnish public use and care property markets. Deka Immobilien, on the other hand, is an example of a general property investor that are not as common in the Finnish care property investment market. (KTI 2020b.)

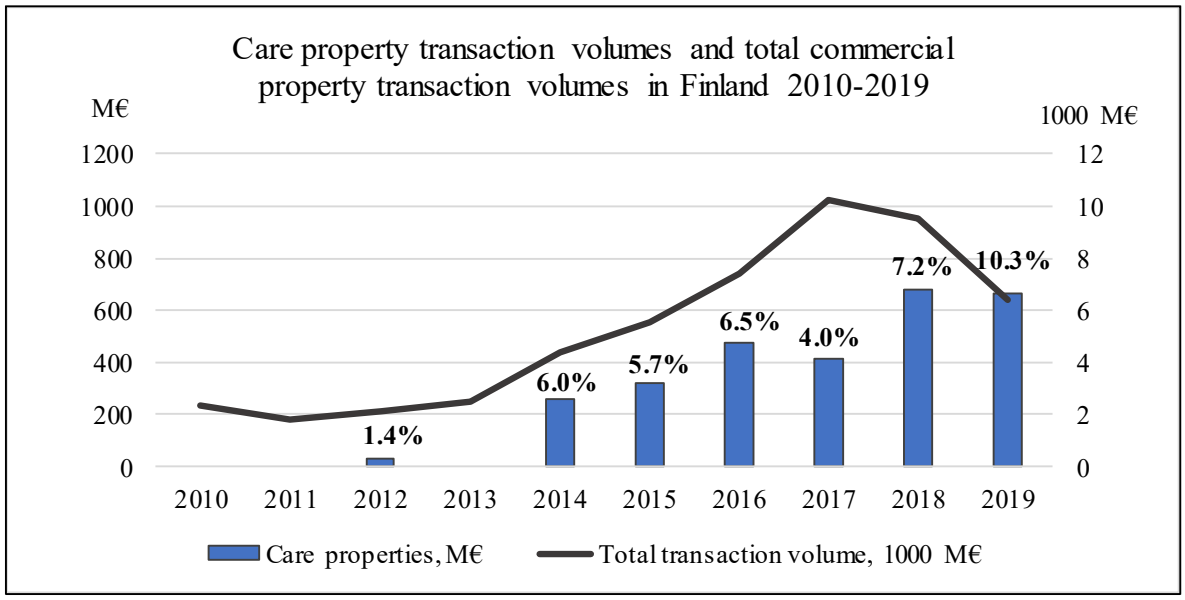

Figure 2. Care property transaction volumes (left) and total commercial property market transaction volumes (right) in 2010-2019 according to KTI. Percentages show the share of care properties of total commercial property transaction volume. (KTI Online 2020.)

The first healthcare fund, EPI Healthcare I, was founded in 2007 with an investment capacity of €120 million. The first special investment fund investing in healthcare properties was founded five years later by Finnreit Fund Management, currently known as eQ Hoivakiinteistöt. (KTI 2015.) In spring 2020, the largest three domestic property funds investing in healthcare properties are managed by eQ Bank, Titanium Rahastoyhtiö, and Evli Fund Management Company. The market value of the abovementioned eQ Hoivakiinteistöt currently stands at €1,200 million. Titanium's healthcare fund amounted to some €554 million in January 2020, and Evli's structured Healthcare I portfolio has approximately €200 million of equity and a total investment capacity of €400 million. Hoivatilat, a listed company showing a brisk growth in recent years, invests not only in healthcare properties but also in educational and children's day care properties. At the end of 2019, the Finnish property portfolio was worth €480 million, half of which is allocated in healthcare properties. (KTI 2020b.)

Majority of the healthcare properties owned by private investors are leased to private care operators, who typically provide their services to the municipalities. In some cases, properties can be also directly rented to a municipality which will either provide the services itself or lease the premises to a private operator. Long leases, typically 10-15 years, make care properties an attractive investment. Furthermore, lease agreements of healthcare properties are usually net

leases, where tenants are responsible for maintenance, property tax and insurances, sometimes even refurbishments. In 2019, the total return of care properties stood at 5.2 %. (KTI 2020b.)

At the beginning of the millennia, the immaturity and the lack of understanding of the sector made the investors hesitant to invest in care properties (Worzala et al 2009, p. 155; Lynn & Wang 2008, p. 50). Care property sector is relatively young (e.g. Lynn & Wang 2008; KTI Online 2020) and although investing in care properties does not greatly differ from investing in other property types, it has some attributes that are distinctive to it and thus, discussed in the following.

Korhonen's thesis on investing in care homes in Finland (2016) reveals the investments to be cash flow oriented. Investors are attracted by long leases and steady cash flows. As a result, the risk of care home investments compared to other commercial property types is lower but higher than for residential from the investors' point of view. (Korhonen 2016, p. 32.) While Worzala et al (2009, p. 155) argued that lack of understanding limits the institutional investors' attraction to invest in care properties, Korhonen's findings (2016, p. 32) explain the same phenomenon in the Finnish care home property market to originate from the small investment size of care home properties instead of absence of insight.

As Laposa and Singer (1999) remark, the size of an industry plays a significant role in determining the investment activity. Financial recourses are allocated not only between different asset classes but also within them, and in order to become investable an industry must be large and important enough to attract capital markets. The United States senior housing and care industry was considered to meet those criteria at the turn of the millennia, when Laposa and Singer (1999) compared senior housing and care industry with the multifamily and lodging sectors in terms of size, performance and financial measures. The study discovered revenues for senior housing and care to be higher than for multifamily and lodging. The study identified three reasons for this: first, the rents are generally higher in senior housing and care as they must cover not only the real estate, but the services provided in the facilities. Second, the occupancy rate is higher than for lodging, which is characteristically a seasonal business, resulting in fluctuating occupancy rates. Third, compared to multifamily, the rents in senior housing and care are significantly higher. (Laposa & Singer 1999, p. 217.)

Children's day care properties have raised investor interest in Finland, but an internet search on care property funds reveals that funds investing solely in day care properties are either rare or do not exist. Funds investing in care properties often include several segments within the care property market. (Evli 2020; eQ 2020; OP 2020; Taaleri 2020; WasaGroup 2020.) This may be encouraged by the limited size of the Finnish care property market, and the relatively small investment size of individual day care properties. Research on Australian property markets by Newell and Hsu Wen (2006; 2008) examining the emerging property sectors – retirement, healthcare, childcare, leisure, self-storage, carpark and agricultural – coincides with the assumption of day care properties being quite small in investment size. Furthermore, the profile on Australian property sector funds in June 2007 reveals healthcare and retirement properties to involve a higher number of funds than day care properties and the total assets of the healthcare ($1,011 M) and retirement funds ($2,671 M) to have been higher than that of day care ($676 M). In Australian dollars, all three combined summed up to $4,358 M over a decade ago, equal

to €2,660 M, which is approximately €1,000 M less than the market value of care properties owned by private investors in Finland in 2019. According to the studies, the emerging property sectors are considered to have grown since the beginning of the 21st century and to keep growing in importance among investors, as investors continue to seek enhanced returns. (Newell & Hsu Wen, 2006; 2008.)

In care property market, real estate and services provided in the facilities are strongly intertwined. Mueller and Anikeeff (2001, p. 60) consider this entanglement to be low in medical offices, higher in hospitals and peeking in sheltered housing, where residents are long-term and require constant care. According to Lynn and Wang (2008), the specific type of facility determines which component – real estate or service – is considered more significant in the valuation of care properties. In elderly housing, senior apartments have more emphasis on the real estate element, whereas skilled nursing facilities centre around the services provided. Between these two are the types of facilities providing a combination of services and housing with varying emphasis. (Lynn & Wang 2008, p. 35.)

2.2 Care Property Stock in Finland

Statistics Finland (2019a) estimates the care property stock to be approximately 13.2 million sq m in over 9,200 buildings. The gross floor area has increased by approximately 25 per cent and the number of care property buildings by 14 per cent compared with the statistics of 2010. It should be noted that these figures by Statistics Finland only cover care properties for institutional care, such as health care buildings, social work activity buildings and prison buildings, but exclude dwellings for special groups intended for continuous residential use. In addition, educational buildings are a category of their own and thus, children's day care centers that fall into the category of early childhood education, are not included in the care property stock. (Statistics Finland 2019c.)

Like the statistics on existing care property stock, data on care property construction projects – recently completed, under construction or planned – are similarly imperfect. KTI Property Information Ltd assisted by RPT Docu Oy compiles quarterly statistics on construction projects in Finland, providing rough figures on care property development. Despite the lack of comprehensive information, it is however evident that majority of the new care property stock as well as redevelopments locate in large cities, Helsinki Metropolitan Area being in the lead. (KTI Online 2020.)

The following subchapters aim to give an overview the Finnish care property stock and its characteristics to enhance the understanding on the Finnish care property markets and to clarify the diverse framework in which the valuers operate when valuing care properties. As the availability of exhaustive data on different types of care is limited, only the most common and largest types of care properties are presented.

2.2.1 Health Centers

The approximately 150 health centers in Finland provide primary health care for the residents. Primary health care services include a broad group of tasks from monitoring the health of population, health counselling and contraception advice to maternity and child welfare clinics,

oral health care and emergency treatment. Municipalities are responsible for organizing primary health care for the residents alone, in collaboration with other municipalities, or by procuring them from the private sector. (Ministry of Social Affairs and Health 2020b.) In-patient wards in health centers have similar characteristics with hospitals, and they also partake in institutional care (Ministry of Social Affairs and Health 2020a).

2.2.2 Hospitals

Most hospitals in Finland are owned by municipals or municipal authorities, and private hospitals supplement the public services by providing for instance day surgeries. Finland is divided into twenty hospital districts that are responsible for the provision of hospital services. Each municipality in Finland belongs to one of the hospital districts and municipalities oversee organizing the medical care services. The most demanding medical operations are provided for in university and central hospitals. In addition, there are regional and local hospitals. (Ministry of Social Affairs and Health 2020a.)

Mehiläinen is among the best known of the private health care service providers and has a long history that began as early as 1909, when then first hospital was founded in Helsinki. Mehiläinen's expansion into a national operator began in the early 21st century and currently it provides social care and healthcare services for private, insurance, corporate and municipal customers in over 500 units. (Mehiläinen 2020.) However, Terveystalo claims to be the largest healthcare service company in Finland with 300 clinics around the country. The customer base is similar to that of Mehiläinen. (Suomen Terveystalo Oy 2020). Both Mehiläinen and Terveystalo are listed companies.

Pohjola Hospital is a nationwide private hospital owned by Pohjola Insurance Ltd. It was founded in 2013 and specialises in the examination and treatment of orthopaedic diseases and injuries. Today, the network includes five hospitals in Helsinki, Tampere, Oulu, Kuopio and Turku. (Pohjolasairaala 2020.)

Pihlajalinna was established in 2001 and first it concentrated on workforce rental, but later founded its own clinics in Pirkanmaa area. Pihlajalinna has grown through corporate acquisitions and is today a nationwide operator. Pihlajalinna has developed a standard to accommodate a partnership with the public sector; Pihlajalinna and municipality or a federation of municipalities found a company together with Pihlajalinna as a majority shareholder, municipality or federation of municipalities owning the rest. Consequently, the company remains private, but the municipality preserves its strong involvement in decision making. (Pihlajalinna 2020a; 2020b.) For example, Jokilaakso hospital in Jämsä is co-owned by a joint enterprise of Pihlajalinna Group, City of Jämsä and Keski-Suomi hospital district. The hospital provides public medical care and receives patients from all around Finland. (Jokilaakson sairaala 2020.) Unlike Pihlajalinna, Kiljava hospital is a regional rehabilitation centre in Nurmijärvi. Kiljava Hospital Ltd. was founded in 2006 by five municipalities – Hyvinkää, Järvenpää, Mäntsälä, Nurmijärvi and Tuusula – and Helsinki University Hospital municipal consortium. The company mainly provides for its owners and the services are all procured through tendering. The company assembles a service packet accessible to the owners of the services delivered by the subcontractors. (Kiljavan Sairaala Oy 2020.)

Eira medical centre and hospital in Helsinki offers a wide range of medical and surgical services. Helsinki University Hospital offers their patients service vouchers that can be used to receive care for varicose veins, cataract surgery, inguinal hernia operations, and breast reduction surgery. (Eiran sairaala 2020.) Another Helsinki based Docares Cancer Center is a treatment facility that has specialized in the diagnostics, treatment and follow-up of cancers since 2007. Docrates is the only private cancer hospital in the Nordics and a quarter of the patients come from abroad. Nonetheless, Docrates also treats patients whose care is paid for by municipalities and employers, thus supplementing the public health care service provision. (Docrates 2020.)

2.2.3 Sheltered Housing

Sheltered housing covers a wide range of accommodation solutions for older, disabled or other vulnerable people, such as mental health and substance abuse rehabilitees. The concept of sheltered housing contains both the apartment and the services needed by the resident from limited day-time assistance to round-the-clock care. Private companies and organisations deliver approximately 40 per cent of the sheltered housing services that the municipalities are obligated to arrange for their residents (Lith 2018a). Table 1 presents the places of business in sheltered housing according to Statistics Finland (2020d). Sheltered housing for the elderly has the highest count, whereas substance abusers rank the lowest. According to Lith (2018a), the number of apartments in sheltered housing for the elderly totalled approximately 52,500 in 2017 and is very likely to be higher today.

Table 1. Number of places of business for sheltered housing in Finland according to target group. (Statistics Finland 2020d.)

	Places of business
Sheltered housing for the elderly	921
Sheltered housing for people with mental problems	391
Sheltered housing for the intellectually disabled	313
Sheltered housing for the disabled	177
Sheltered housing for substance abusers	65
Total	1 867

In terms of employment and turnover, providing sheltered housing has been one of the most rapidly growing branches in Finland. The number of companies operating in sheltered housing has decreased since 2008, while the number of places of business has increased. This development derives greatly from the aggressive growth of diversified care business companies through establishing new operation units and acquisitions of small and medium size companies that operate on local or regional markets. While there are still several small companies operating in the sheltered housing business, the growth in company size is evident; large companies employing a minimum of 250 people have increased their share of employers and turnover the most. (Lith 2018a.)

The largest six companies and organisations in sheltered housing that employed over 1,000 people in 2018 were Attendo Oy, Hoiva Mehiläinen Oy, Attendo Mi-Hoiva Oy, Rinnekoti-Säätiö sr, Invalidiliiton Asumispalvelut Oy and Esperi Care Oy. The number of companies and

organisations with at least 200 employees was 29, of which eight were foundations and four associations, leaving limited companies in vast majority. Furthermore, several of them have foreign parent companies. Based on the number of people employed, the share of offshore-based companies in sheltered housing business increased from 8 per cent in 2010 to 34 percent in 2017. (Lith 2018a.)

Statistics Finland does no longer have a service providing information on the number and area of sheltered housing buildings. However, Lith (2018a) discovered the number of sheltered housing buildings and buildings for institutional care to have been 3,047 in 2016, comprising an area of 3,186,527 square meters. Based on area, just under a quarter of them were either municipally or state owned and approximately a third was owned by the third sector. Housing and real estate companies accounted for a quarter of the properties and other companies for 17 per cent. Entrepreneurs and other private owners were a marginal group with over three per cent. (Lith 2018a.)

Furthermore, Lith (2018a) notes that 44 per cent of the basal area of the stock comprises buildings constructed in 1960's, 1970's and 1980's. The increasing demand for sheltered housing boosted the construction in the 21st century, producing a large volume of new buildings that are on average considerably larger (over 1,700 sq m) than their old counterparts (under 700 sqm in the 1980's). (Lith 2018a.) Regardless of the increment in the new stock in sheltered housing buildings and buildings for institutional care, it is evident that a large share of the stock is old and very likely outdated.

2.2.4 Institutional Care

The Decree on Defining the Grounds for Outpatient Care and Institutional Care (1806/2009) notes that the latter is given in hospitals and in-patient wards in health centers, and in other similar institutions, such as in nursing homes and in institutions for the disabled and for people with substance abuse problems. In social welfare institutions, care and treatment is provided for people who, despite the demand for special attention and care, do not require hospitalization and are unable to manage at home or in outpatient care regardless of the social and healthcare services provided.

Table 2. Places of business in institutional care in Finland (Statistics Finland 2020d).

	Places of business
Institutional care for the elderly (nursing homes)	124
Institutional care for the disabled	55
Institutional care for substance abusers	4
Total	183

Table 2 illustrates the distribution of places of business between institutional care for the elderly, for the disabled and for substance abusers according to Statistics Finland (2020d). The elderly is by far the largest customer group also in this segment. Lith (2018a) remarks that during the 21st century there has been a shift from institutional care to favouring sheltered housing, so it is possible that there have been more establishments for institutional care before that.

2.2.5 Children and Families

Statistics Finland (2020d) informs the number of places of business for day care centers to amount to 1,008, of which almost a third (291) are in Helsinki Metropolitan area. However, a statistical report on early childhood education by Finnish Education Evaluation Center (2019) presents the number of day care establishments to reach 3,614 in continental Finland. The majority of these, 2,624, were municipal day care centers, and 993 private ones. The statistical disparity is explained by the difference in the definition of place of business; while the numbers of Finnish Education Evaluation Center refer to day care centers as administrative units Statistics Finland considers a combination of establishments as one day care centre. Most of the day care centers are separate units, but they can also be placed in other co-used facilities or in buildings providing also other services (RT Information File 103083).

According to the Finnish Education Evaluation Center (2019), there were in total 468 private early childhood education providers in 2019, of which associations 209 and companies 259. The largest service provider had 177 day care centers, almost 18 per cent of all private day care centres. The top three service providers in the branch accounted for 356 day care centers, covering nearly 36 per cent of all private day care centers. Lith (2018b) notes that the number of companies operating in early childhood education grew until 2014 and started to decline after that. Meanwhile, the number of establishments has increased. It can be concluded that there is a development leading to a concentration of private early childhood education provision.

Table 3. Places of business of care properties for day care, child welfare, mother-and-child homes and domestic violence shelters (refuges) in Finland (Statistics Finland 2020d).

	Places of business
Day care centers	1 008
Institutions for children and adolescence and professional foster care	596
Mother-and-child homes and refuges	42
Total	1 646

According to the Child Welfare Act (417/2007), the parents or other custodians are primarily responsible for the wellbeing of the child. However, at times the parents or custodians are unable to care for their children or dependants in a manner that would provide them a safe and balanced environment in which to live and grow. In 2018, almost 4,400 children were placed in care with urgency and approximately 18,500 children and young adults aged 0-20 years were residing in institutions or in foster care. The length of the placements varies and not all urgent placements result in the child being taken into custody. (Finnish Institute for Health and Welfare 2019.) According to Statistics Finland, there are nearly 600 institutions and professional foster cares, as Table 3 presents.

In 2020, there were 29 domestic violence shelters in Finland, with a total capacity to provide for 211 customers. Each regional government has at least one domestic violence shelter. Mother-and-child homes that help both new mothers and families in need of support, often operate in connection with domestic violence centers. The number of mother-and-child homes currently totals 13. Finnish institute for health and welfare is the responsible body for arranging and

developing the services, including the coordination of the service network. (Finnish Institute for Health and Welfare 2020.)

2.3 Role of Municipalities

The number of municipalities in Finland has decreased by roughly a third since the beginning of the millennium, and municipal mergers have reduced the count to 310 (Association of Finnish Municipalities 2020b). Local governments are responsible for arranging services for their residents, most of which are defined by law. These statutory duties include education and health care services, cultural, youth and library services, urban planning and land use, water and energy supply, waste management, environmental services, health and social services, and fire and rescue services. According to the Government's draft legislation on the reform of healthcare, social services and rescue services, the latter two would be transferred to the 21 counties (Soteuudistus 2020). The regional government, health and social services reform will be discussed briefly in subchapter 2.3.3. In addition to the obligatory duties, municipalities may take over also other tasks of self-government which usually regard economy, employment and housing. (Ministry of Finance 2020a.)

According to a survey of local government duties (Ministry of Finance 2015), self-governmental tasks compose currently only 10-20 per cent of the municipal duties and have limited importance in the finance of the municipalities. Self-governmental duties are often tasks that could not be arranged without the municipality's involvement and can be arranged either solely by the municipality or in collaboration with the private or third sector. Nonetheless, municipalities play a significant role especially with respect to providing state-funded housing; while non-profit organizations own 15 per cent of the state-funded housing stock, approximately 85 per cent is owned by tenement building companies owned by municipalities, or limited companies owned by one or several municipalities. State-subsidized housing will be reviewed in subchapter 3.5.

Municipalities are major players in the housing service market. Local governments provide for people who need assistance or support in arranging their housing according to the Social Welfare Act (1301/2014), the Services and Assistance for the Disabled Act (380/1987) and the Act on Special Care for Mentally Disabled Persons (519/1977). Housing services according to the Social Welfare Act include assisted living, sheltered housing and intensive sheltered housing. The first one is provided for people who need support in independent living, and the second to people requiring an appropriate apartment and care. The last one is meant for people in need of round-the-clock care. Many residents of sheltered housing and intensive sheltered housing are senior citizens. (Association of Finnish Municipalities 2020a.)

In 2018, almost half a million people aged 75 years or more were still residing at home. While there is little change in this segment over the past five years, the importance of intensive sheltered housing had increased by approximately 13 per cent during the same period. Proportionally the share of long-term institutional care has on the contrary decreased, as much as by 50 per cent from 2015 to 2018. (Ministry of Finance 2020b.) Municipalities organize institutional care for the elderly in nursing homes, in other intensive sheltered housing units and inpatient wards in healthcare centers (Association of Finnish Municipalities 2020a). Sheltered housing for the seriously disabled was arranged for 6,800 residents in 2018. While sheltered housing needs have been on the rise, also the number of disabled people in institutional care

had, similarly to the elderly people, halved from 2015 to 2018 amounting to 521 people. Social welfare and healthcare services for the disabled are primarily organized as a part of the general service system, but should they prove insufficient, the services are complemented according to the Services and Assistance for the Disabled Act (380/1987) and the Act on Special Care for Mentally Disabled Persons (519/1977). The number of people with disabilities resorting to these services is estimated to be at least 100,000 persons. (Ministry of Finance 2020b.)

Evidently, in addition to housing and institutional care services, municipalities provide their residents a number of other social and healthcare services that do not necessarily involve residency. For instance, many hospital admissions and visits to health centers, not to mention day care services, have no housing element.

The greatest volume of mental health services is produced in health centers and specialist medical care facilities. However, non-governmental organisations also provide a wide range of mental health services, and social services and parishes undertake activities that may be considered mental health services. Private sector services are important especially in outpatient care, including occupational healthcare. Most of the clients of mental health services are outpatients, as only a small percentage requires hospitalization. Housing services for the mental health rehabilitees are primarily produced by private entrepreneurs or companies or NGO's. Recently, the number of beds in sheltered housing has increased in tandem with the decrease of beds in psychiatric hospitals. (Finnish Institute for Health and Welfare 2020.)

Municipalities are obligated to organize early childhood education and care as laid down in the provisions of Act on Early Childhood Education and Care (540/2018). The Act applies equally to early childhood education and care produced by a municipality, joint municipal authority and an independent service provider. In 2018, there were over 252,000 children in Finland attending early childhood education and care, equalling approximately 74 per cent of all children aged 1-6 years. About 83 per cent of them were clients of communal day care. Albeit the participation rate and number of children attending early childhood education has increased, the number of children aged 0-6 years has decreased during the past decade. Population projections forecast the development to continue further, but at an uneven pace and having the strongest effects in rural municipalities. (Ministry of Finance 2020b.)

Social welfare and healthcare services stand for approximately 60 per cent (18,300 million euros in 2018) of the net costs of the operational economy (Ministry of Finance 2020a). Specialised medical care accounted for 38 per cent and primary health care for 18 per cent of the net costs. (Ministry of Finance 2020b).

2.3.1 Outsourcing

Municipalities have three options for producing social welfare and healthcare services. They can arrange them by themselves, in collaboration with other municipalities, or they can procure them from a private sector company or association. This trend where private and public sector operate together in the market of commodities related to social politics is called welfare pluralism and the means of producing services a multi-provider model. (Volk & Laukkanen 2007.)

Municipalities are quite autonomous decision-makers with respect to outsourcing social welfare and healthcare services, and there is no law compelling the municipalities to do so. Nevertheless, public procurement must follow the Act on Public Contracts and Concessions (1397/2016) which stems from the European Community directives on public procurement. The decision on whether to outsource or not, however, has always been locally made. Despite the framework provided by the Act, local authorities interpret the law differently, contributing in variation in procurement practices. (Karsio & Anttonen 2013 p. 97.)

The Act on Public Contracts and Concessions (1397/2016) includes separate provisions governing social and health care services and other specific service procurements. According to the provisions, the contracting entity must take into consideration the legislation regarding the special needs of users and consultation. While the Act stipulates on the procurement practices, the contracting entities are bound by the special legislation that must be followed, for instance when specifying the object of procurement, such as accessibility or quality.

The focal legislation pertaining to the quality of social welfare and healthcare services and customer rights comprise the Constitution of Finland (731/1999 – *"The public authorities shall guarantee for everyone, as provided in more detail by an Act, adequate social, health and medical services and promote the health of the population"* – Act on the Status and Rights of Patients (812/2000), Social Welfare Act (1301/2014) and Health Care Act (1326/2010). Special legislation complements the fundamental principles by incorporating the special needs of certain client groups, for example the disabled (Act on Disability Services and Assistance 380/1987), the elderly (Act on Supporting the Functional Capacity of the Older Population and on Social and Health Care Services for Older Persons 980/2012) and children (Child Welfare Act 417/2007). Both the general and special legislation above obligate the contractor to consider the special needs of the clients, particularly in the procurement of individual, long-term and recurring social welfare and care services (Hankinnat.fi 2020).

These obligations rest upon the social welfare and healthcare services being produced for the clients. Furthermore, some service mixes may compose a long-term care relationship, as in services for the old people suffering from memory loss and in services for the disabled. Procurement legislation does not limit the length of the contract and in most cases, non-fixed term contracts are possible according to the law. It is even possible that the obligation to consider the length of the contract may in fact demand for, if not a non-fixed term contract, at least a sufficient term. (Hankinnat.fi 2020.)

By 2018, 19 Finnish municipalities had outsourced their social welfare and healthcare services, and at least 18 municipalities had undergone a partial outsourcing. The customer base of the municipalities having totally outsourced their social welfare and healthcare services is approximately 2 per cent of the Finnish population. The 19 municipalities are relatively small, may have a higher service need in some segments and a heavier cost structure than in other municipalities. Deteriorating municipal economy and an uncontrollable increase in social welfare and healthcare costs, particularly in special health care, were the primary motivators for resorting to outsourcing all social welfare and healthcare services. (Jokinen 2018.) However, YLE News (2020) reported on 11th June on the decision by Helsinki City Council to outsource Kannelmäki healthcare center and in addition, to provide primary healthcare services through

outsourced service provision for 20,000 residents in Viiskulma area. The decisions to outsource were justified by recruitment problems of doctors and the need to secure service provision. Futhermore, the poor condition of Kannelmäki healthcare center appears to have contributed to the outsourcing decision for its part. (YLE 2020.) According to a survey conducted by Parhiala and Hetemaa (2017), 9.9 per cent (50 centers) of the Finnish health centers were completely outsourced covering almost 7 per cent of the population. In continental Finland there were 150 responsible municipalities or cooperation districts, of which 13 had outsourced their health centre operations entirely and 14 in part (Parhiala and Hetemaa 2017).

Jokinen (2018) argues that total outsourcing is a step towards stronger municipal autonomy and an attempt to gain more control over service provision. Consequently, collaboration with other municipalities is replaced with a private service provider. Parhiala and Hetemaa (2017) discovered that outsourced service provision is increasingly produced by a joint enterprise of one or several public operators and a private company. Also, some municipalities have founded public companies to tend for the municipality's healthcare provision. Yet, it is important to understand that regardless of the outsourcing, partial or complete, the municipalities and cooperation districts are not removed of their responsibility to provide for the services (Parhiala & Hetemaa 2017).

According to Karsio & Anttonen (2013, p. 98), eldercare services have been central in outsourcing. In 2018, half of the intensified sheltered housing for the elderly was organized by a private company or association (Ministry of Finance 2020b). Complete outsourcing of social welfare and healthcare services has proven to accelerate the rundown of institutional care, such as nursing homes and wards in health centers. The statistical coverage on round-the-clock care is unfortunately insufficient to support any assumptions of to what extent institutional care has been replaced by round-the-clock care. (Jokinen 2018.)

2.3.2 Service Vouchers

Service vouchers provide municipalities a way to organize their social welfare and healthcare services, which are provided by the private sector and approved by the municipality. The fundamental difference between outsourcing and service voucher system is that in the former case, the competition between different providers is arranged by the local authority, whereas in the latter it is the individual service user who makes the decision between different service providers (Karsio & Anttonen 2013 p. 95-96).

The service voucher system was first introduced in 2004, after the legislative amendments concerning the service voucher system took effect and allowed for the municipalities to employ the use of service vouchers in parallel with independent and outsourced service provision (Volk & Laukkanen 2007). However, a specific law on service vouchers, the Act on Health and Social Service Vouchers 569/2009, was passed five years later in summer 2009 removing service-specific constraints and allowing a flexible use of service vouchers in using social and healthcare services. The motivation of the Act is to enhance customer choice and improve the effectiveness of the services by the competitive element introduced by customers. (Karsio & Anttonen 2013 p. 95-96.) Karsio and van Aerschot (2017) note that the service voucher system will only augment customer choice when there is a sufficient amount of adequate service providers in the local markets. Furthermore, Volk and Laukkanen (2007, p. 16) point out that in outsourcing and

especially in tendering, large companies have an advantage over small ones as they can achieve economies of scale in producing services, much like municipalities themselves.

In outsourcing the municipalities choose the service provider and the service, leaving little freedom of choice for the actual user. Nonetheless, municipalities, or municipal federations, are the most central operators in the service voucher system. They decide on the introduction of the service voucher system, the services to be purchased with the vouchers, the criteria for the service provider approval, the recipients of the vouchers, and the value of the voucher. (Volk & Laukkanen 2007.) Since the voucher is an alternative to publicly provided services and can only be used to choose and use privately provided services, it cannot be used for urgent or involuntary treatment (Karsio & Anttonen 2013 p. 100).

Vouchers are generally available to all clients requiring social or health services in municipalities where the vouchers are used. However, in order to qualify as a voucher recipient, they must undergo a needs assessment conducted by municipal officials, as in seeking access to all publicly funded services. The value of the voucher can be either fixed at a given level of need or income related, depending on the practices adopted and on political compromises in different municipalities. (Karsio & Anttonen 2013 p. 100.) According to the Act on Health and Social Service Vouchers (569/2009), the local authority is obligated to pay for the services up to the predetermined value of the voucher, and the excess falls to the service user. Municipalities must set the value to a level which on the first hand is reasonable for the client, and on the second hand, compares to the cost of providing the services as the municipality's own production.

Albeit municipalities make the decisions on the criteria for the service provider approval, they have limited freedom of choice in selecting the service providers and are restricted by the Act on Health and Social Service Vouchers (569/2009) which sets requirements for the private service provider. They must meet the demands and qualifications defined in the Private Healthcare Act (152/1990) and the Act on Supervision of Private Social Services (603/1996), and to have proper insurance coverage in case of treatment injury. In addition to these requirements, they must fulfil the specific preconditions set by local governments in terms of customer needs, volume or quality of the services, or requirements related to the prevailing circumstances or other similar matters.

The number of municipalities offering service vouchers has grown from the beginning of the 21st century, along with the increment of different uses. The data on service voucher employment is imperfect and assessing the trajectory of the use of service vouchers relies on few, sporadic surveys. According to the most recent survey, by 2018 the use of service vouchers in healthcare services stood at 40 per cent and the share of social services at 60 per cent. Special healthcare composed the largest share of service voucher use in healthcare services with 57 per cent, followed by primary health care with 34 per cent. As for social services, home help services and sheltered housing according to Social Welfare Act both reached a share of almost 20 per cent. (Nemlander & Sjöholm 2018.)

Early childhood education is a service for children aged 0-6 years, and municipalities are obligated to arrange these services as needed. Service vouchers are becoming more popular in early childhood education and care, and in 2018, 11 per cent of children were provided early

childhood education by a service voucher. From 2015 to 2018 the number of service vouchers has nearly doubled from 15,514 to 27,847 in early childhood education and care with simultaneously decreasing private day care allowances. (Ministry of Finance 2020b.)

2.3.3 Social and Healthcare Reform

The operation environment of social welfare and healthcare sector has been under revision for quite a while; the need for structural reform has been considered evident and in the making for a decade and a half. The reform to restructure municipalities and services in Finland commenced in 2005-2011 and the municipal reform was executed in 2011-2013. The consultation paper on organizing social and healthcare services was prepared in 2013-2014, and in 2015-2019, the reform to restructure regional governments and social and healthcare services concluded without enforcement with the resignation of the government. (Valli-Lintu 2017.)

The origins of the social welfare and healthcare reform proceed before anything from the operational changes following from the age structure of the population. On one hand, aging will lead to a higher demand for services once the baby boomers will reach the age at which the functional capacity will start to decline along with emerging health issues. On the other hand, the aging and retiring personnel working in social welfare and healthcare sector will contribute to and increase the shortage of labour. Recently, increasing urbanization has shaped the need for regional service provision and declining birth rate will affect the demand for basic services, particularly in education. (Ministry of Finance 2020b.)

The draft government proposal concerning the health and social services reform and the organisation of rescue services was circulated for consultation in mid-June 2020 (Soteuudistus 2020). According to the draft proposal, the responsibility for organizing social welfare and healthcare services and rescue operations would be assigned to autonomous regional governments. Social welfare and healthcare expenditure are the most rapidly growing item, and the reform would relieve the municipalities of those costs. In the future, municipalities' statutory duties would primarily compose of educational and cultural activities. The objective of social and healthcare reform has been to improve equal access to services and to control the costs. These objectives were pursued in the reform model presented by the previous prime minister and continue to be in a pivotal role in the alignments of current government platform. (Ministry of Finance 2020b.) The incumbent government has put a greater emphasis on preventive measures by giving a higher rank to preventive and proactive work instead of heavy services. The availability of and access to services is currently considered to be at an unsatisfactory level and for example waiting times in nonacute conditions are even by international standards long. (Ministry of Social Affairs and Health 2020e.)

Producing social and healthcare services requires facilities and municipalities have a considerable amount of properties at their disposal, either through directs ownership or other arrangements. A research project carried out in 2017 concerning the building stock of municipalities including prognoses for the post-reform era revealed a significant development and saving potential consisting of empty or ineffectively used buildings, of buildings that are unsuitable for their use, and of energy efficiency. (Korhonen et al 2018.)

Regardless of their differences in size, structure and economy, all the municipalities considered the greatest challenge to be how to adapt the building stock to meet the future service needs, and not least because of the existing building stock. On one hand, in areas where the population is decreasing, adjusting the service network to better suit the diminishing needs is demanding because the existing building stock does not provide a space efficient solution. On the other hand, areas gaining in population and with urgent investment needs, are unable to stop using their old building stock. Furthermore, the assessment disclosed that the repair deficit is sizable, and some building types suffer from considerable indoor air issues. (Korhonen et al 2018.)

Maakuntien tilakeskus Oy is a limited company in the field of social services that was founded in 2017 (Finder 2020). The role of the company was instrumental in the reform to restructure regional governments and social and healthcare services with the objective to lease out all the properties the regional governments would need in their operation. Maakuntien tilakeskus Oy is a subsidiary of Senate Properties, the work environment partner and specialist of the Finnish government (Senaatti.fi 2020), and according to the original plan, regional governments were supposed to gain ownership of Maakuntien tilakeskus by the beginning of 2020 at the latest. After the transition, regional governments would have paid rent to the municipalities for leasing their properties. The historically large property arrangement was put to a halt in spring 2019 with the resignation of the government. (Helsingin Sanomat 2020.) In February 2020 Ministry of Finance and Maakuntien tilakeskus agreed on a service contract whereby Maakuntien tilakeskus pursues to compile an overall picture on the current property stock of the municipalities' building stock and facilities by the end of 2021 (Maakuntien tilakeskus Oy 2020).

2.4 Marketisation

Finland and other Nordic countries were well known for their extensive care service provision for children and the elderly. However, public services that were financed by tax revenues, produced by municipalities and provided to whoever may need them, have during the past three decades undergone significant changes both in the ideology and way of organizing them. Publicly funded services are removed from the public sphere of state and municipal provision. Marketisation is the major rationality that continues to re-organise and re-shape public service provision in Finland. (Anttonen & Karsio 2017.) Yet, in Finland marketization has become a leading driver of change only recently (Karsio & Anttonen 2013).

Marketisation in this context refers to a multidimensional restructuring process where the presence of private for-profit providers, influence of market ideas, logics and mechanisms within public service provision increases (Anttonen & Karsio 2017). According to Anttonen and Meagher (2013), there are two ways to approach the concept of marketization in public service provision. Firstly, marketisation realises through competition and involvement of private actors in organizing service provision. In practice this means the implementation of outsourcing, competitive tendering and service vouchers, for example. Secondly, marketisation also takes place when the public sector adapts private sector rationalities and practices without the involvement of private sector actors in service provision. In the first approach, service provision is transferred from public to private organisations, particularly for-profit organisations, whereas in the other, service provision remains public but internal markets are created within the public

sector. The first model, which is adopted in Finland, the funding is left to the public sector and only the production of social goods is marketized, is referred to as "marketisation from within" (Anttonen & Karsio 2017).

In addition to outsourcing and the voucher system, legislation is also a powerful tool of marketisation. As Karsio and Anttonen (2013) point out, Finnish legislation tends to present framing guidelines instead of detailed prescriptions. This leaves the authorities a moderate amount of leeway and results in varying outcomes of marketisation between municipalities. Figure 3 illustrates the marketisation timeline in Finland from the legislative perspective.

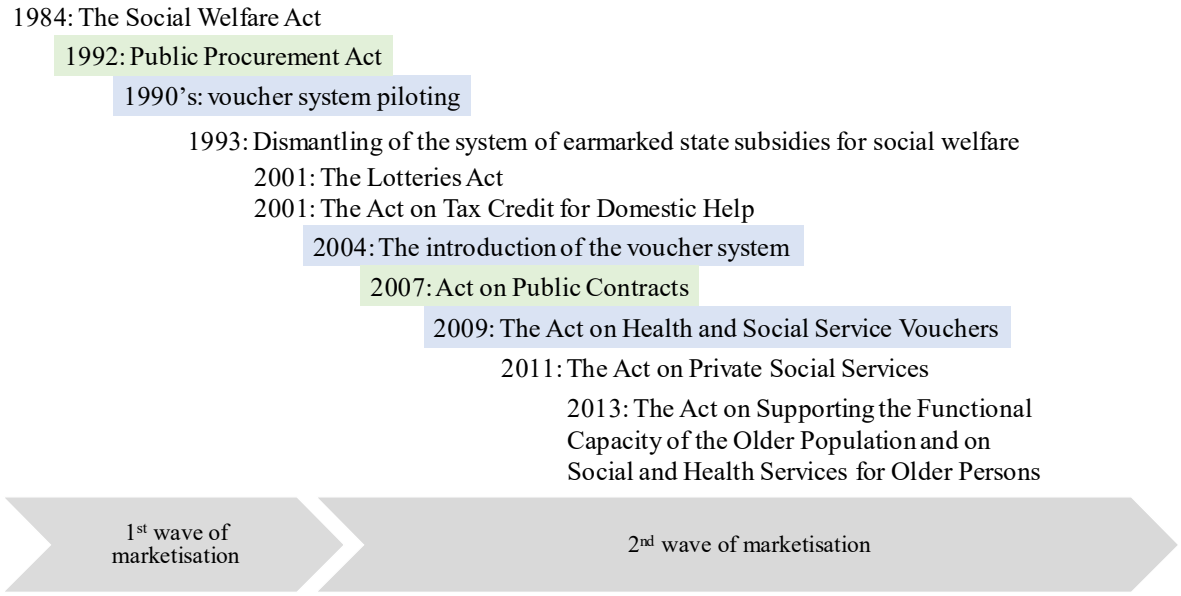

Figure 3. The marketisation timeline in Finland (adapted from Karsio & Anttonen 2013).

In Finland, marketisation in public service provision has proceeded in two waves. The first one took effect mainly as outsourcing services that were formerly publicly produced. At the commence of outsourcing, non-profit providers were favoured due to the special status of Finland's Slot Machine Association (RAY). Until the Lotteries Act (1047/2001) RAY had a monopoly over slot machines and had – and still has – an obligation to use its profits for public good. Financial aid from RAY enabled the construction of about 50 old age homes in the 1960's, and in the mid-1980's and mid-1990's a total of 14,000 service housing flats were built for older people needing help in their daily chores but not round-the-clock assistance. RAY subsidies were not only instrumental for the expansion of care provision for the elderly, but also fundamental in laying a solid foundation for third sector organisations. Legislation on public procurements demanding competitive neutrality changed the operational preconditions and paved the way for for-profit providers. (Anttonen & Karsio 2017.)

The second wave of marketisation in Finland is based on customer choice model. The model was promoted through implementing a service voucher system that was piloted in 1990s, and later integrated into social legislation in 2004, as mentioned earlier in subchapter 2.3.2. The Act

on Health and Social Service Vouchers (569/2009) enabled municipalities to arrange all social and health services through a voucher model, emergency and involuntary services notwithstanding. Customer choice model has, however, raised some controversy in the context of elderly care. (Anttonen & Karsio 2017.) For example, Karsio and van Aerschot (2017) remark how not only the physical and mental condition, but also the availability of informal assistance and support from the family and other close network, affect the individual's ability to act as a decision-maker.

Major implications of marketisation in Finland are epitomized in two phenomena: increase in for-profit service production, and the forced adjustment of non-profit operators. Although the share of private for-profit sector has risen in all publicly funded services, the increase has been highest in serviced housing and in other round-the-clock residential care. Competitive neutrality has compelled the non-profit service providers to become more like their for-profit counterparts in order to succeed in competitive bids; communitarian principles have been replaced by the logic of market competition. (Anttonen & Karsio 2017.)

Marketisation created an incentive for large international care companies to enter in Finnish care markets. This development has significant potential with respect to the Nordic care model and welfare state: first of all, international companies gain political power and are capable of influencing the development and care system, and secondly, as they are efficient in tax avoidance, the state loses an ample amount of tax revenues. The third aspect concerns the labour market. (Anttonen & Karsio 2017.) Rissanen et al. (2018) discovered how employees are leaving the public sector, and the personnel in the private and third sector has grown faster than in the public sector during the 21st century. Some hospital districts are understaffed; however, the variation is great between districts. The shortage of doctors in healthcare centers is in part because doctors are increasingly working in special health care, in the private sector, and in occupational health care.

2.5 State Subsidies

Approximately a third of the Finnish housing stock, around one million apartments, has been constructed with the aid of state subsidies. These buildings – rental, right-of-occupancy and part-ownership – have been constructed since 1949 with the objective to provide safe housing conditions for residents at reasonable costs. (ARA 2020b.) The Housing Finance and Development Centre of Finland (ARA) implements the housing policy by granting subsidies, grants and guarantees for housing and construction, and by controlling and supervising the use of the ARA housing stock. ARA belongs to the administrative branch of the Ministry of the Environment. (ARA 2020a.)

According to the Act on Interest Subsidy for Rental Housing Loans and Right of Occupancy Housing Loans (604/2001), interest subsidies are paid out of state funds for loans for new building construction, acquisition and renovation of a rental dwelling and right of occupancy housing. The Act stipulates that "The amount of an interest-subsidy loan for rental dwelling shall be at most 95 per cent of the approved construction, purchase or renovation costs of the rental dwelling." The Act on Interest Subsidy states that interest-subsidy loans are granted based on social appropriateness and financial need. The borrowers may be local authorities or other public corporations – primarily municipalities –, corporations that meet certain preconditions,

and limited liability companies in which one or more of the two organizations mentioned above have direct dominant authority. The second category may include organizations for social housing, old age housing associations and student housing associations.

"ARA grants subsidies for improving the housing conditions of special-needs groups" that comprise the following target groups: "homeless people, refugees, students, people with mental health or substance abuse problems, disabled people, people suffering from memory illness and old people in poor physical condition" (ARA 2020c). Act on Subsidies for Improving the Housing Conditions of Special Groups (2004/1281) stipulates on grants issued for the construction, acquisition or renovation of a rental building or rental dwelling in cases when there is an interest-subsidy loan in accordance with the Act on Interest Subsidy for the same project. By the end of 2017, the number of ARA apartments under restrictions totalled 418,000 and a quarter of this, 104,000 apartments, were for special-needs groups. ARA investment subsidies have boosted the construction of apartments for special needs, as the investment subsidy compensates for the higher costs resulting from space and accessibility requirements. (ARA 2019a.) The maximum subsidies depend on the exceptional arrangements required to support the groups housing (ARA 2020c). Housing projects to support the most vulnerable of the special-needs groups – homeless, mentally disabled, mental health rehabilitees and elderly people suffering from memory loss – are given a priority when granting the subsidies (ARA 2019b).

Housing for special needs groups must be organized as an integrated part of other housing stock and the neighbouring communities, near the amenities. Separate housing units must be avoided but are however possible for cogent reasons. Furthermore, residents from different special-needs groups are not placed in the same building unit, whereas for example group homes for a special-needs group may be integrated into a regular multifamily building that is partly resided by people not belonging to any of the groups mentioned earlier. ARA requires that planning for the housing needs for special-needs groups must rely on the long-term housing needs in the municipality, and in the counties once the social welfare and healthcare reform will be in effect, as well as on the residential market situation. It is recommended to arrange housing in ordinary apartments also exploiting existing housing stock. As the housing and service needs of the elderly vary considerably depending on age, functional capacity and illnesses, there are needs for diverse housing solutions. Senior housing can for instance be realised not only as separate apartments in senior housing buildings or in sheltered homes, but also as separate group homes, and as a combination of these. (ARA 2019b.)

2.6 Regulation and Responsible Authorities

The governance of social welfare and healthcare services follows a three-tier system: central government, regional, and municipal. Ministry of Social Affairs and Health is the supreme agency regarding social welfare and health care system in Finland. It prepares legislation, guides its implementation and oversees directing, guiding and developing social welfare and health care services, for example. Licensing and monitoring, however, is the responsibility of the Regional State Administrative Agencies (AVI) under the guidance of National Supervisory Authority for Welfare and Health Valvira. At the local level, municipalities are the responsible body for organizing social welfare and healthcare services for their residents. (Ministry of Social

Affairs and Health 2020c.) Figure 4 presents the three tier-system of the governance of social welfare and healthcare services in Finland.

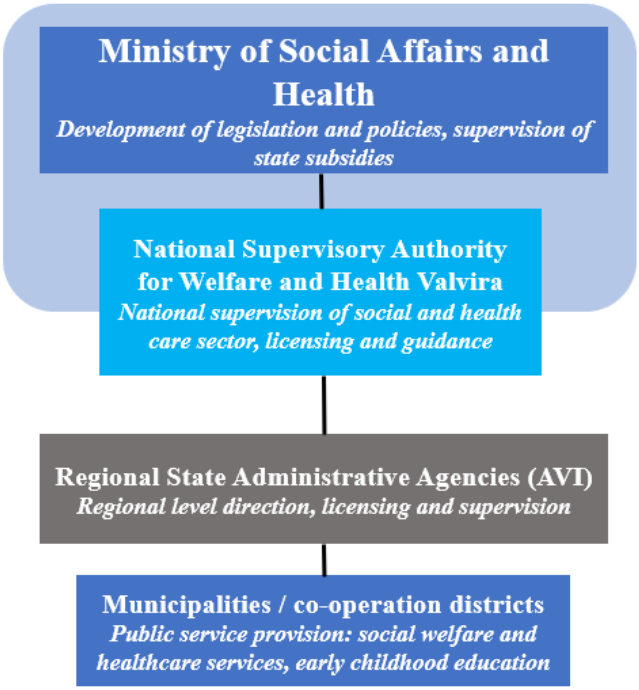

Figure 4. Governance of social welfare and healthcare services in Finland follows a three-tier system.

National Supervisory Authority for Welfare and Health Valvira is a centralised agency under the Ministry of Social Affairs and Health in charge of the supervision of the social and health care, alcohol and environmental health sector. Valvira guides the Regional State Administrative Agencies with the objective to achieve harmonized licensing and supervisory practices throughout Finland and to provide licensing for social and health care providers. While the licensing activities of Valvira include licensing of social welfare and health care professionals, the supervisory scope of the Authority extends not only to the professionals, but to the care units as well. (Valvira 2020a.) Valvira supervises and guides healthcare professionals and medical facilities both in private and public sector with the objective to ensure the adequacy of services provided by different healthcare professionals and of medical facilities. Valvira cooperates with the regional administrative agencies that have similar duties in the field of social welfare and healthcare on a regional level. (Valvira 2020b, 2020c.)

The six Regional State Administrative Agencies (AVI) in Finland guide and monitor municipal and private social welfare and health care services in their own region and evaluate the availability and quality of basic services provided by municipalities (Ministry of Social Affairs and Health 2020c). The agencies steer, license and oversee the services provided in the social welfare and healthcare sectors and collaborate with the municipalities and other regional and local actors to ensure high-quality welfare services for the residents. The actions of the agencies

are informed by the legislation both in the field of social welfare services and healthcare and the agency works together with the Ministry of Social Affairs and Health, the National Supervisory Authority for Welfare and Health Valvira, Finnish Institute for Health and Welfare, and other actors. (AVI 2020b, 2020c.)

A regional state agency issues a license to private social welfare and healthcare service providers when they operate within the region of that particular agency. However, should the service provider operate within two or more regional agency areas, the licensing authority then becomes Valvira. Private social welfare service providers offering round-the-clock housing services, child protection services and foster care are always required a permit, whereas services that are not round-the-clock, such as home help services, are only subject to notification. *(*Act on Social Services 922/2011.) The registering authority in these instances is the regional agency unless the service provider has given the notification in conjunction with the license application, when the authority is Valvira (Valvira 2020h).

According to the Act on Private Social Services (922/2011), a new license must be applied for when the service provider has no existing license to produce and deliver the services. Additionally, when the AVI licensed service provider begins to operate in more than one regional agency areas, the issuing authority is Valvira, and the service provider must apply for a new license. The service operations cannot be started before the license has been issued and violating this regulation is punishable by law. Similarly, when the service provider adds another office or post on the existing license, the provider must apply for a license for alteration and no services cannot be delivered until receiving the license. Furthermore, an integral change in the services delivered necessitate that a concerning license has been issued. These changes include relocation and expanding by establishing new service units. (Valvira 2020g, 2020i, 2020j.)

Monitoring social welfare and healthcare is enforced as proactive, systematic monitoring and reactive, subsequent control. Systematic monitoring is based on data collection defined by law, and occasionally on Valvira's own reports. Systematic monitoring, which is primarily in-house control, is executed according to the monitoring programs and plans co-drafted with regional agencies. (Valvira 2020d, 2020f.) The latest national monitoring program for social welfare and healthcare is for 2020-2023. The main emphasis of the four-year program is on promoting and ensuring the in-house control of the care units, which is considered the basis of customer and patient safety (Valvira 2020e). Subsequent control, on the other hand, is usually initiated by complaints and notices. However, Valvira may commence voluntary monitoring measures, for instance based on information revealed in public. (Valvira 2020d, 2020f.)

2.6.1 Space Requirements

The Act on Private Social Services (922/2011) requires the care unit to have adequate facilities, equipment and staff to provide for the clients and to deliver the services needed. While for some social services there are clear regulations on staff sizing, as for instance in child welfare, the actual space requirements are much more ambiguous; the facilities must be healthy and otherwise suitable to enable the given care, education and guardianship. Yet, there are no stipulations regarding for example the exact minimum size of an apartment in a sheltered home, or whether the apartments must include a bathroom of their own or not.

However, the National Supervisory Authority Valvira directs the design and dimensioning of apartments for social welfare customers through their supervision programs. The residents in sheltered homes have the right to the same living standards as other people and both private and common spaces should be accessible, safe and home-like. All residents must have private rooms with their own sanitary facilities, unless they specifically request for cohabitation. The quality of the premises depends mainly on the personal spaces and sanitary facilities. In group homes, the significance of common spaces is regarded higher than in other types of sheltered housing. (Valvira 2012; 2014.)

Furthermore, as Lith (2018b) points out, for instance Building Information Ltd presents in their RT Information File examples and principles of designing and dimensioning of typical bedrooms, recreation rooms, dining rooms, bathrooms and of kitchen and sanitary facilities. Building Information Ltd is a publishing house owned by the Building Information Foundation RTS, which aims to promote good planning and building methods and good property management practices (Rakennustieto 2020a). Building Information File, comprising for example standards, regulations and product files, is used regularly by 40,000 building professionals in Finland (Rakennustieto 2020b). The information cards include examples of shared facilities in sheltered housing buildings, such as common rooms, corridors and storages. Sheltered homes are similar to ordinary residential buildings, but they include more auxiliary facilities to support residents' wellbeing and care workers in their tasks.

According to RT Information File 93-11134, which contains design and dimensioning instructions for sheltered homes for the elderly, apartments in sheltered homes are small apartments with access to shared facilities. The overall design must consider the resident's reduced ability to move and function and address the fact that the resident may need assistance in daily chores and spend a considerable amount of the day bedbound. Also Housing Finance and Development Center of Finland (ARA) has its own requirements that must be followed in buildings that have been constructed with financial aid from ARA (Lamminmäki et al 2015).

Table 4. Minimum living area of sheltered home apartments by the number of residents and type of apartment according to RT Information File 93-11134.

Residents	Type of apartment	Living area, sq m
1 resident	1 room + kitchen space + alcove	35 - 40
	2 rooms + kitchen space	40 - 45
2 residents	2 rooms + kitchen space / kitchen	45 - 60
	3 rooms + kitchen space / kitchen	60 - 75
Kitchen space is a space under 7 sq m equipped for cooking.		

Table 4 presents the types and minimum sizes according to living area for apartments in sheltered homes for the elderly according to RT Information File. In group homes, however, the minimum size for apartments is lower, having a living area of 25 sq m. Group homes are a type of sheltered homes and provide a safe living environment for residents with memory loss or otherwise in need of round-the-clock care. The residents have their own rooms with bathrooms, but no kitchen. (RT Information File 93-11134.) Common spaces immediately connected to the personal spaces in group homes serve as supporting living space (ARA 2015). For ARA

financed apartments, the minimum size for a modifiable apartment is 25 sq m, including a bathroom of 4-5 sq m (Lamminmäki et al 2015).

Table 5 below compiles the minimum living areas in sheltered homes for the disabled people requiring round-the-clock care. For single resident apartments, the living areas are practically the same, and also the apartment size in group homes is in the same magnitude. For two-resident apartment the comparison is more difficult, as in Table 4 the apartment types include one- or two-bedroom apartments, whereas Table 5 presents only studio apartments.

Table 5. Minimum living area of sheltered home apartments in round-the-clock care for the disabled people according to Valvira (2012, p. 21).

Residents	Type of apartment	Living area, sq m
1 resident	1 room	35 -
	1 room in a group home	20 - 25
2 residents	1 room	40 - 50

There are many aspects to be considered in the design and dimensioning of sheltered home apartments. The materials used must be durable and easy to clean, the often poor eyesight of the residents requires high levels of light with appropriate fittings as well as correct use of colours and contrasts in interior design, the flooring must be slip-resistant even when wet, and the walls and ceilings must be strong enough to allow for the installation of railings and ceiling hoists. The apartments in sheltered homes must be designed accessible and allow for the use of aids, such as wheelchairs and walkers. A standard wheelchair requires a tread circle of 1,500 mm which must be taken into account particularly near entrances, in the sanitary facilities and by the bed. Furthermore, the apartment should have a space for storing the wheelchair or walker. All doors in the sheltered home must be accessible by wheelchairs and have a minimum clear opening width of 850 mm. (RT Information File 93-11134.)

In a way, all facilities in the sheltered homes are also used by the employees working there. Thus, the design of the building and the apartments should consider the ergonomics of the personnel, meaning there must be enough room for the employees to assist the residents without the risk of injury due to poor working positions. For instance, according to the Information File, the toilet seat must be placed at least 150 mm from the wall, and in group homes, the need for space at the dining room table is 2-2.6 sq m per person. However, the target group has a considerable effect on the actual need for space in sheltered homes. While residents who are able to take care of their personal hygiene manage in a 4-5 sq m bathroom, a seriously disabled resident may require as much as 8-10 sq m of space (Lamminmäki et al 2015).

RT Information File 103020 provides general principles for designing health centers and clinics. These consist of several different types of premises that should not only serve the various needs of the customers, but also be versatile, adjustable and compatible with one another. The design should consider different customer groups, various groups of personnel, and strive to create space solutions that will support the renewing services and contribute to high occupancy of the facilities. The space types in healthcare centers and clinics include common areas, offices and other administrative premises, laboratories and imaging facilities, consulting and treatment

rooms, personnel facilities, and facilities for equipment maintenance. Customer traffic is recommended to be kept separate from that of nursing staff, instruments, equipment, samples and maintenance. (RT Information File 103020.)

Work in health centers and clinics is done in shifts and the same facilities may be used by several experts during the same week at different times of the day. Some examinations and procedures – such as orthopaedic and physiatrist ones – require more space than is needed in a standard room, but otherwise the functional designing principles are the same: doors open from the corridor into the room, the washbasins are near the nursing staff's operating area, and the room is recommended to have an emergency exit. (RT Information File 103020.)

Health centers and clinics can be very different with respect to their size and service provision, and the Information File presents only universal guidelines for designing these units. It is however evident that the design plays a major role in the space efficiency, functionality and safety of the building. Most of the visits in these facilities are short-lived, but the customer base is very versatile and some of them are physically handicapped or have other impairments and ailments that complicate their ability to function. Accessibility and low-effort transitions are also a considerable element in the customer experience.

Objectives and premises for the design and dimensioning for a day care building are presented in RT Information File 103083. Early childhood education is nowadays preferably delivered in multiform and flexible facilities, and the facilities should be accessible, functional, safe and comfortable. The floor layout should be simple and universal, and the transitions indoors and exiting should be effortless. As children are smaller than the adults that care for them, this affects not only the scaling of the furniture, but also the installation of windows and permanent fixtures, when they are meant to serve children. Furthermore, noise reduction, soundproofing, lighting and ventilation require special attention in day care units.

The number of children simultaneously attending the day care centre determines the spatial dimensions and floor areas of the facilities. The required usable area per such child – comprising group facilities for children including toilets, common spaces, and entrance halls – is 7-8 sq m, but in practice the demand for space is higher, 9-13 sq m per child. For example, when the premises are located on more than one floor, the need for usable space increases. The reserved area per child in the entrance hall is 0.6-0.9 sq m, 0.33-0.5 sq m in the mud room, and 0.4-0.5 sq m in the lavatory. (RT Information File 103083.) The instructions for safety planning for day care centers are compiled in RT Information File 103085.

Children in day care are served breakfast, lunch and a snack, in round-the-clock day care also other meals. A catering kitchen requires less space than for instance a cook-and-chill method, where the food is delivered to the unit on a weekly basis. Day care centers must have premises for cleaning, doing the laundry, waste management and if the gross floor area of the day care building is more than 1,200 sq m, a civil defence centre. As for the personnel facilities, the requirement for office and administrative facilities is 0.35 sq m per child, there must be one lavatory per 15 employees and one shower per 25 employees. (RT Information File 103083.)

At least some municipalities produce targeted guidelines and instructions for social service providers. For instance Helsinki, Tampere, Jyväskylä and Rovaniemi have compiled their own instructions on how to design and arrange the facilities for the provision of day care services (Helsinki 2018; Jyväskylän kaupunki 2018; Rovaniemi 2017; Tampereen kaupunki 2018). By nature, they are complementary to the general construction planning in the municipalities and often rely on the information produced by Building Information Oy.

Construction is, by and large, regulated business. The Land Use and Building Act (132/1999) stipulates on construction, technical requirements, building permit procedure and building supervision by authorities. Substantial technical requirements regard among other things the strength and stability of structures, fire safety, user safety and accessibility. More detailed provisions and guidelines concerning construction are issued in the National Building Code of Finland. According to the Ministry of the Environment Decree on Housing, Accommodation and Workspace Design (1008/2017), the minimum size of a room is seven square meters and the minimum living area of an apartment 20 square meters. In student apartments a minimum of 16 square meters is accepted, providing that there are sufficient common spaces in the same building.

2.7 Drivers for Care Property Development

Korhonen (2016, p. 32) discovered the market for care home properties to have a divergent cycle from that of other property types. Where the demand for office space often derives from economic activity and population growth, space demand for sheltered housing originates from demographics. Population ageing is a global phenomenon. United Nations (2019) has estimated the worldwide number of people aged 65 years or more to be 703 million in 2019, and globally the increase of the elderly is estimated at 120 per cent by 2050. In other words, while in 2019 one person in 11 is over the age of 65, in 2050 the ratio will be one in six. The report notes that the factors explaining this global megatrend trace back to improved life expectancy and particularly to the survival beyond 65 years.

In terms of demographics, Finland follows the global trend recognised by United Nations. Figure 5 illustrates the population by age group and population projection in Finland, showing the rapid aging of the population. By the end of 2019, people aged 65 years or more constituted 22 per cent of the entire Finnish population of 5.5 million, and people aged 85 years and over, 2.7 per cent (Statistics Finland 2020b). In 2030 the estimated number of people aged 65 and over is approximately 1.46 million, equalling over 26 per cent of the population and for the number of persons aged over 85 years, the figures are projected at 216,000 and 3.9 per cent (Statistics Finland 2019b). The elderly is the largest individual group in need of residential care and the majority of care properties are for elderly care.

According to Tervo (2019), urbanization in Finland has led to regional concentration along with population growth in metropolitan areas and large university cities. While these regions continue to gain in population, others face a negative population forecast. In addition to rural areas, which suffer the most from depopulation, small cities are also strongly affected. Also Rissanen et al (2018) noted that regions in Finland develop in a dissimilar manner and many factors affecting service needs follow this differentiation. The change in demographics will reflect on all social and health care services, particularly on services for the elderly. In 2018, as much as

38 per cent of the population lived in municipalities with a decreasing population and 14 per cent in municipalities where the depopulation rate is rapid. Furthermore, the age dependency ratio – the ratio between the people of working age and of non-working age – is declining, resulting in a higher demand for publicly funded social and healthcare services as the number of people covered by occupational health care is decreasing. (Rissanen et al 2018.)

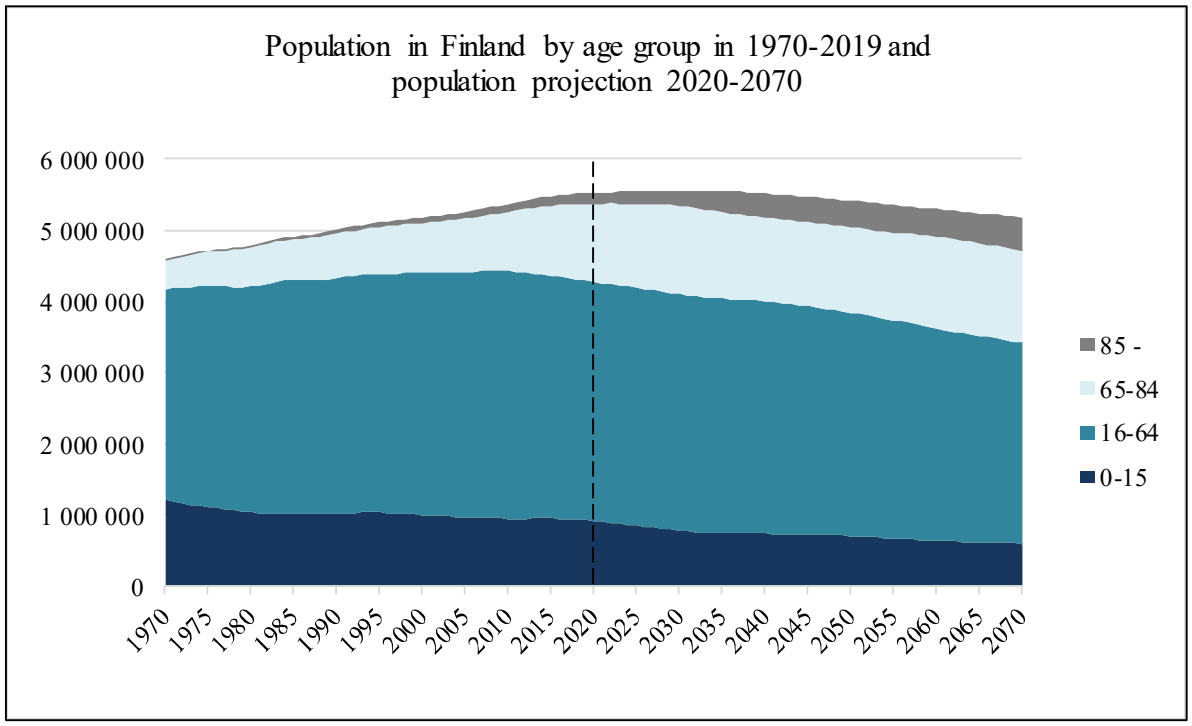

Figure 5. Finnish population by age group and population projection according to Statistics Finland (2020b, 2020c).

The age structure by region varies considerably. While the lowest percentage (17 per cent) of people of 65 years and over was found in Helsinki and Uusimaa, East Savo reached the other extreme yielding as high as 32 per cent. However, the largest increment in the elderly population by 2030 will occur in Helsinki and Uusimaa area, where the number of people of 65 years and over will grow by 90,000 people. (Rissanen et al 2018.) This is a natural trajectory that follows from the migration. Currently the age structure even in depopulating regions creates demand for elderly services, including sheltered housing, but at some stage the customer base will decline, if not plunge in some municipalities. Nonetheless, in Helsinki Metropolitan Area and in Uusimaa the peak is yet to come.

According to the Statistics Finland population projection (2019b), birth rate has decreased by approximately 20 per cent since 2010. If the birth rate remains at its current level, mortality rates will exceed birth rates in all regions in 15 years. The projection estimates Finland's population to start decreasing in 2031, based on the current development. (Statistics Finland 2019b.) The declining trend of birth rate has an impact on the future population development in all areas and for the need of social and welfare services. There will be fewer people in need of maternity and

child health clinic services, as well as early childhood education services, for example. Yet, as mentioned earlier, the areas in Finland are not uniform and some regions and municipalities have fewer issues stemming from decreasing birth rate and the age structure. According to Statistics Finland (2019b), births exceeded deaths in 60 municipalities in 2018 and in 2030 the count is expected to decrease to 35. By 2040, only 12 municipalities would have a higher number of births than deaths.

The problem with projections, however, is that they are uncertain, and the longer the forecasts, the higher the degree of uncertainty. The demographic components of the projections – birth rate, mortality and migration – are based on assumptions that may prove to be incorrect; for instance, birth rate varies from year to another and two projections may deliver very different outcomes even when conducted on consecutive years.

Furthermore, the global nature of migration is an aspect worth further considering. According to Statistics Finland (2020a), approximately eight per cent of the Finnish population is of foreign background, meaning that either both or the only known parent of the person has been born abroad. For comparison, in Sweden the foreigners account for approximately nine per cent of the population (Statistics Sweden 2020), whereas in United Kingdom, the foreign-born population constituted an estimated 14 per cent – 9.3 million people – of the UK population (Vargas-Silva & Rienzo 2019). In the opinion of the researcher, the concept of sustainable development contains all possible reasons for migration: economic, social, political, or environmental. Poverty, ethnic conflicts, political instability and environmental degradation are examples of motives for migration presented by Brown in 2008, all of which apparently still valid if not increasingly so. Climate change is identified as one driver of global migration, causing both abrupt or long-term incentives for population relocation. A part of this response to environmental change may affect Finland in ways we are unable to predict yet.

3 Property Valuation and Valuation Methods

The following chapter discusses the concept of market value, bases of value, property valuation from the valuation standards' point of view, property valuation approaches and valuation inputs. Furthermore, as care properties are often transacted in portfolios, the chapter reviews also portfolio valuation. The concluding subchapter discusses bias and uncertainty in property valuation.

3.1 Property Valuation and Bases of Value

The value of a property can be interpreted in several ways. IVSC (International Valuation Standards Committee) defines in total six bases of value, including the aforementioned investment value. The other five IVS-defined bases of value are market value, market rent, equitable value, synergistic value and liquidation value. Non-IVS-defined bases of value may be needed depending on the valuation assignment and include for example bases of value recognized and adopted by international agreements. (IVSC 2017, p. 17.)

The concepts of market value and investment value can be simplified as follows: market value is a probable value of an asset or a liability on a given value date, whereas investment value represents the long-term value of an asset or a liability. Investment value is a subjective estimate of the investment object, and the investment value of a same investment object can vary between different investors. Unlike investment value, market value is an objective estimate of the value by independent valuers, which remains constant regardless of the participants. (Geltner et al 2014, p. 258.)

The imperfect nature of the property market results in the need for property valuations to determine prices for them. Property markets are characteristically heterogeneous and illiquid, transaction costs are high, information constrained, and there is no central market place. Particularly the heterogeneity of the property, lack of central market and limited information requires the use of valuations. (Dunse et al, 2010.) Market values for properties are based on valuations, exploiting the information available on the imperfect property market. The following subchapter explains the concept of market value.

3.2 Market Value

Pagourtzi et al (2003, p. 383) state that defining a value is a means for interpreting the assumptions made in appraising the transaction price for a property if it were to be sold in the open market. To ensure consistency in the process of valuation, IVSC has introduced a common definition of market value. Market value defined by IVSC (2017, p. 18) is as follows:

"Market Value is the estimated amount for which an asset or a liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion."

Market value is not a predetermined transaction price of an asset but an estimated transaction price for which an asset should exchange on the valuation date. The estimated market value is a

time-specific reflection of the market's state and conditions on the valuation date. (IVSC 2017 p. 19). Moreover, IVSC (p. 20) states that market value does not acknowledge attributes of an asset that are of value for a specific owner or purchaser and unavailable to other buyers in the market.

Pagourtzi et al (2003) note that validity of the valuation depends greatly on the accuracy of the estimate for the market price of the property. Therefore, "the model should reflect the market culture and conditions at the time of the valuation" and to represent the basic structures the market is based on. In the property market, valuations are in fact best estimates of the transaction prices. (Pagourtzi et al, 2003.)

The market value of an asset will reflect its highest and best use, that maximises the potential of the asset and is possible, legally permissible and financially feasible. Highest and best use may be a continuation of a property's current use or an alternative use that fulfil the three requirements listed above. Highest and best use is specified by the use that a market participant would plan for the property at the time of the transaction. (IVCS 2017, p. 20.)

3.3 Market Value in Theory

As the definition earlier remarks, market value is the estimated amount for which an asset or liability would transact between a buyer and a seller on a given value date, irrespective of the valuation method used. The final transaction price, however, depends on the opposite parties: a certain buyer candidate may, for example, may have a special interest regarding the property and thus, might be willing to pay more for it. Market value is a theoretical value that in advance reflects the most suitable price of all possible prices for the property. Regardless of its theoretical nature, market value is a crucial and practical instrument in decision making. (Geltner et al 2014, p. 257-258.) According to the definition of market value, the buyer is not willing to pay just any price for the property, but instead operates under market conditions; the assumed buyer would not pay more for the asset than the market requires. The seller is not forced to sell nor prepared to sell at any price, nor committed to a price not considered reasonable in the current market, but instead is willing to sell the asset at market terms after proper marketing. (IVSC 2017, p. 19.)

On a well-functioning property market, market value constitutes a theoretical maximum for a property as the buyer is not expected to pay more for the property than it would trade for. On the other hand, market value should be the minimum value that the seller should accept, even if the investment value of the seller was lower than the market value. On a well-functioning property market comprising several similar investors and properties, investment value and market value are in theory equal. Should the investment value of several investors be higher than the market value, market value would rise to the same level with the investment value. Correspondingly, if market values were below investment values, trade decelerates, and transactions are made only out of necessity. (Geltner et al 2014, p. 243-246.)

Compared to some other asset classes, for example stocks and bonds, obtaining and using information is more challenging on property markets. The lack of adequate and easily available information reflects on the property market in two ways: first, as random noise in prices and valuation, and second, as slowness and predictability compared to for example stock markets.

Random variation in property valuation and pricing enables investing in properties with positive and negative net present values based on market value. In part, this is a result from imperfect information among market participants and from the partly random nature of property markets. This in not as such an outcome of an error made by market participants, but rather a result from the characteristic of market value – market values can never be perceived with complete accuracy, they can only be estimated. (Geltner et al 2014, p. 265-266.)

Geltner et al (2014, p. 266-267) consider the lack of information to be not only an opportunity, but a threat as well. The same characteristics apply also to the predictability of property markets. Property market does not react to changes with the same agility as for instance the stock market and adapts to market information only partly in the short run. Hence, property markets are considered more predictable than, for example, stock market. Nonetheless, property market is far from a perfectly and easily predictable market. (Geltner et al 2014, p. 267.)

The formation of market value can be demonstrated with a graph. In Figure 6, the buyer and seller populations for a property are illustrated with two frequency functions. The buyer population is on the left and the seller population on the right. Furthermore, the picture presents investment values and reservation prices for buyers and sellers. (Fisher et al 2003, p. 273-274.) The frequency functions have been assumed to be normally distributed.

In a well-functioning property market, where market participants would disclose their investment values, the equilibrium price for the buyers' and sellers' investments values is found at point C, maximizing the number of buyers and sellers. In actual property market the investment values of market participants are not available and hence, determining the equilibrium is unattainable. Therefore, market information is derived from actual transactions that give potential market participants an indication of the equilibrium, around which the reservation prices of market participants settle. Reservation prices are primarily based on investment values, but also in part on information derived from the market. (Geltner et al 2014, p. 277-278; Fisher et al 2003, p. 272-273.)

Reservation prices of a rational buyer are not higher than investment values, but in some cases they can be lower. On the other hand, whereas reservation prices of a seller are not below investment values, they can be higher. Potential buyers with plenty of market observations lower their reservation prices below investment value closer to the equilibrium price, because they do not want to pay more than is required. Mutually, sellers with market observations rise their reservation prices above investment value as they do not desire to sell cheaper than needed. Moreover, sellers and buyers with investment values considerably different from the market value produced by market information leave the group of potential market participants. Based on the above-mentioned, frequency function for reservation prices have greater kurtosis than that of investment value and is closer to the actual equilibrium price. (Geltner et al 2014, p. 278.)

According to Fisher (et al 2003, p. 276) with the growing liquidity in property markets – i.e. greater volume in transactions – the reservation price distribution of both seller and buyer move to the right (Figure 6). The shift in the byer distribution may however be more exaggerated than that of sellers, thus explaining both the price increase and stronger liquidity that the greater overlap region of distributions depicts. A diminishing transaction volume produces an opposite

reaction; the seller's reservation price distribution moves to the left faster than the buyer's, and the overlap of distributions is lesser.

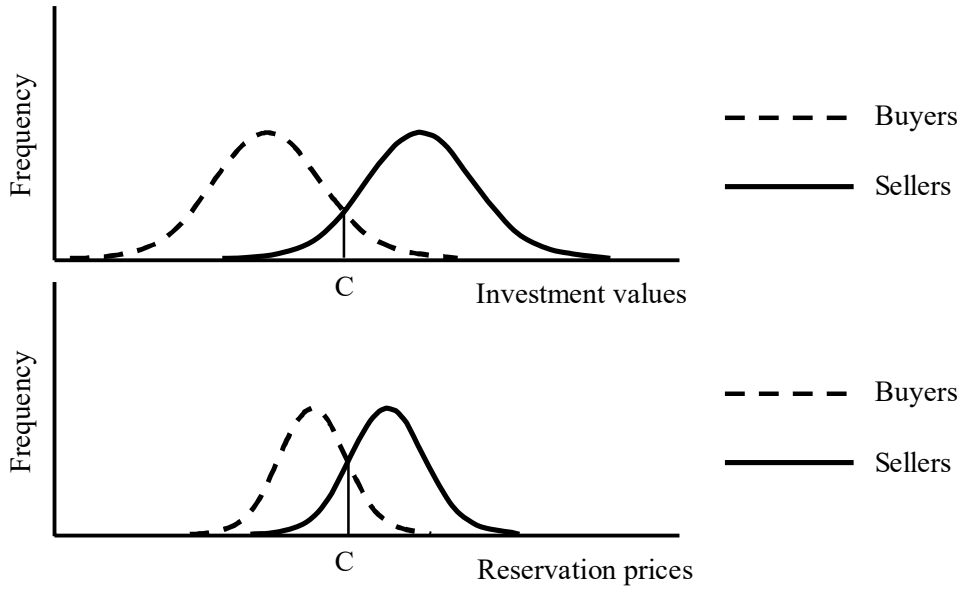

Figure 6. Frequency functions of investment values and reservation prices (adapted from Fisher 2003).

When there are several comparable market observations on properties and reliable information on the transactions at hand, the frequency distributions of reservation prices approach one another and the equilibrium price C. This phenomenon may be referred to as market density. Less market observations and greater insecurity regarding the equilibrium price lead to a smaller overlap in distributions, and the threshold for transactions is greater, contributing in reduced market liquidity. Correspondingly a greater liquidity is associated with better and more easily obtainable price observations, as buyers and sellers will find each other with less effort on the market, their view on market equilibrium price is more congruent and hence, the likelihood of transactions higher. Inadequacy and lack of market observations on special use properties are often the reason for the challenges in estimating a market value for them. (Geltner et al 2014, p. 278.)

The equilibrium price C is often defined as the market value or the exchange value of the property. However, the transaction price of the property rarely corresponds to the estimated market value but instead the perceived transaction prices are dispersed around the estimated market value. Thus, the market value is from a statistical perspective located at the same point as the average of the frequency distribution of the perceived transactions at a given moment. It can be assumed, that the statistical average of perceived transactions is market value. (Geltner et al 2014, p. 279.)

3.4 Valuation Approaches and Methods

Typically, the user of the property is separate from its owner. The transaction price, however, is often the same whether the purchased property is intended for occupation or investment purposes regardless of the differences in their views. The worth of the asset to an owner-occupier is the profit it generates for the business as a factor of production, whereas the investor approaches the worth of the asset as the discounted value of the rental income. Evidently both groups should also take into consideration a potential resale price for the asset. Valuers are required to identify potential buyers for the asset and buyer preferences by means of available market information. (Pagourtzi et al 2003, p. 384-385.) The latter part of this chapter presents the valuation methods available for property appraisals.

Pagourtzi et al (2003) categorize valuation methods into traditional and advanced methods. The rationale behind advanced methods builds on mimicking the market behaviour of the market participants. The attempt to determine the point of sale is further based on analysing the artificial market. Advanced methods are characteristically more qualitative compared with traditional ones. According to Pagourtzi et al, advanced valuation methods include the following five methods: artificial neural networks (ANNs); hedonic pricing models; spatial analysis methods; fuzzy logistics; and autoregressive integrated moving average (ARIMA). (Pagourtzi et al 2003.) The advanced methods will not be discussed any further in this study as the focus of the research in on practical valuation.

Predominantly methods of valuation resort to some form of comparative approach in order to assess market value. Pagourtzi et al (2003) refer to these methods as traditional valuation methods. According to Pagourtzi et al they include the following methods: comparable method, investment/income method, profit method, development/residual method, contractor's method/cost method, multiple regression method, and stepwise regression method. Comparable method, income method and cost method are the main approaches used in valuation, and they all rely on the economic principles of price equilibrium, anticipation of benefits or substitution (IVSC 2017 p. 29). The terms IVSC endorses when referring to these three methods are market approach, income approach and cost approach, and they will be discussed in more detail in this study.

According to IVSC (2011, p. 29) the valuer must choose a valuation approach and method for an asset that is most applicable under the prevailing circumstances in which the valuations is conducted. Selecting the proper valuation approach and method should, at very least, consider the following four aspects:

a) the purpose of the valuation and how it will affect the basis of value;
b) strengths and weaknesses of potential approaches and methods;
c) how appropriate each method is with respect to the asset in question and approaches and methods applied by participants in the relevant market; and
d) accessibility to reliable market information required to apply the method.

Bases of value define the fundamental assumptions the reported value will rest upon. Selecting the appropriate basis of value depends on the purpose of the valuation and is of paramount importance, as it may have a considerable effect on the valuer's selection of methods, inputs

and assumptions and ultimately, on the value. (IVSC 2003, p. 16.) IVSC-defined bases of value were presented in Chapter 3.1.

According to IVSC (2017, p. 24), the premise of value originates from the circumstances of how the asset is used. Different bases of value may either necessitate a particular premise of value or accept the deliberation of several premises of value. Some of the typical premises of value are:

a) highest and best use;
b) current use/existing use;
c) orderly liquidation, and
d) forced sale.

IVSC does not mandate the valuer to employ multiple valuation methods for the valuation of an asset, particularly in situations where a single method is considered to produce an accurate and reliable conclusion. However, valuers are encouraged to resort to multiple approaches and methods especially when the inputs for a single method alone are insufficient to result in a reliable outcome of the indication of value. (IVSC 2017, p. 29-30.)

3.4.1 Market Approach

Sales comparison, or market approach according to IVSC, is the most frequently used valuation approach (Pagourtzi 2003, p. 386). The approach is based on recent transactions that relate closely to the subject of valuation within the same market area and exploits the market evidence of the prices or other available information, such as price per square meter, or cap rate. When the number of actual comparable transactions is low, valuers may consider the asking prices of either identical or similar assets. However, comparable listings method should not be used as the only indication of value but rather as a complementary approach with other methods. Comparable transactions are rarely identical to the subject asset and even the similarity may be challenged. Thus, valuers must examine the physical, judicial and economic characteristics of the comparable sales and make the necessary adjustments to compensate for the differences between the comparables and the subject asset. The greater the deviancy between the comparables and the asset, the more unreliable the method is. (Brueggeman & Fisher, p. 297; IVSC 2017, p. 31-33.)

Pagourtzi et al (2003, p. 387) point out that the market approach relies heavily on the availability, accuracy, completeness, and timeliness of the transaction data. The sources of data comprise public records, commercial data providers, and the valuer's personal contacts and professional network. Pagourtzi et al perceive market approach as a four-step process:

1) Finding the most comparable sales for a given subject asset;
2) Adjusting the transaction prices of the comparables to equal the attributes of the subject asset;
3) Using multiple estimates of value to conclude an estimate of market value; and
4) Presenting the results.

The benefits of the market approach include the use of actual, paid transaction prices in estimating the market value of an asset. Problems may arise from the unrepresentativeness of the comparables or the lack of them altogether. Furthermore, market approach exploits information on events that have happened in the past. (Kasso 2014, p. 256.) Kasso highlights the significance of the valuers' professional expertise in verifying the applicability of the available market evidence.

According to Wyatt (2013, p. 104) market approach is a reliable method in active property markets with substantial and timely evidence. However, during volatile market conditions or when the subject properties and the submarket of interest represent specialized properties with little market evidence, the method's reliability becomes challenged.

3.4.2 Income Approach

The income approach estimates the value of an asset via the future cash flows it will generate. The value of an asset depends on the income, cash flow or cost savings brought about by the asset. Income approach should be the method of choice and given considerable emphasis when the capacity of an asset to produce a cash flow is critical from a participant perspective, or in case there are no relevant market comparables but instead, plausible projections on the amount and timing of future income exist. One of the ground principles of the method is that investors expect to receive a return on their investment. This return is expected to coincide with the riskiness of the investment. (IVSC 2017, p. 36-37.)

Although income approach has several potential implementations, in practice the approach relies on future cash flows being discounted to present value. According to IVSC (2017, p. 37) they are mainly variations of discounted cashflow method, and the same techniques are applicable also to the alternative methods under income approach. The most recent IVSC release on international valuation standards does not itemise any methods apart from discounted cash flow. The previous release (IVSC 2011, p.27), however, specified the following three methods to fall under the income approach:

a) Direct capitalisation: dividing net operating income by the capitalisation rate.
b) Discounted cash flow: forecasted cash flows are discounted back to the valuation date.
c) Option pricing models.

Income approach is typically employed when valuing commercial properties, and professional investors and actors favour it almost without exception (Kasso 2014, p. 253). The advantage of income approach is its ability to produce value estimates that in most cases reflect best the prevailing sentiment in the property market. The drawbacks, on the other hand, pertain to predicting the elements that contribute to the return, such as interest rate and sudden increase in cost level. (Kasso 2014, p. 256.)

3.4.3 Cost Approach

The value indication of cost approach builds on the principle that a buyer is prepared to pay no more for an asset than procuring an asset of equal utility would cost, whether by purchase or by construction. The indication of value is based on the current replacement or reproduction cost of an asset that is adjusted according to the physical deterioration and other relevant forms of

obsolescence. (IVSC 2017, p. 42-43.) In addition to physical deterioration, functional or external obsolescence must be accounted for when estimating the value of the building (Brueggeman & Fisher 2008, p. 304).

According to IVSC (2017, p. 43), there are three primary cost approach methods:

a) Replacement cost method: value is indicated via the cost of a similar asset offering corresponding utility.
b) Reproduction cost method: the cost of recreating a replica of the original asset.
c) Summation method: the value of an asset is a sum of the separate value of its component parts.

In order to arrive at depreciated replacement cost (DRC), replacement cost must be adjusted for the obsolescence and physical deterioration the asset has undergone to compensate for its quality defects and reduced utility. Essential to the method is that it aims to estimate the price that the participant would agree to pay for the utility of the asset, and the exact physical properties of the asset are secondary. Replacement cost method is most suitable for valuing relatively new assets. (IVSC 2017, p. 44.)

Apart from costs, cost approach methods fail to account for the other factors contributing to value and overlook the effect of return, anticipated value change, property transactions, or the prevailing market conditions (Kasso 2014, p. 256). Kasso further explains that because of these shortcomings, cost approach should not be chosen as a sole valuation method if other approaches are possible. Cost approach is applicable for valuing special and special-use assets that typically perform poorly in terms of market evidence (Kasso 2014, p. 257; IVSC 2017, p. 78).

3.4.4 Valuation Inputs

Valuation inputs are essential to value composition and the eventual outcome of the valuation process. Valuation inputs comprises all data and information that are used in the valuation, be it actual or assumed. Actual inputs include, for example, transaction prices for similar or identical assets, realized cash flows generated by the asset and actual costs of comparable assets. Assumed inputs comprehend cash flows that are estimated or projected, estimated cost of a hypothetical asset and market participants' perceived attitude to risk. (IVSC 2013, p. 25.)

Actual inputs are normally preferred over assumed ones, providing they are more relevant than assumed inputs. When dated observations on actual transactions do not reflect the market information at the time of valuation, or historic cash flows and actual cost information are not indicative of future ones, assumed inputs will bear more relevance. Furthermore, multiple inputs will increase the certainty of valuation, whereas restricted amount of inputs require particular caution in examining and verifying the data. (IVSC 2013, p. 25-26.) Oftentimes the valuer is dependent on information that has been provided by for example the client or some other party than the valuer. In that case the valuer must confirm the validity and reliability of the data. When the credibility of the data is compromised, it should not be used in the valuation. (IVSC 2017, p. 12.)

According to IVSC (2013, p. 24), the nature and source of valuation inputs should mirror the basis of value that in turn stems from the valuation purpose. Concluding an indication of market value demands the use of market derived data; thus, market approach must employ market derived inputs. For example, to indicate market value by means of income approach, inputs and assumptions should coincide with the ones adopted by market participants, and when using the cost approach, costs and depreciations should be market-based. The accessible data and market conditions specify the applicability of each valuation method or combination of methods. When the inputs are based on appropriately analysed market derived data, each of the methods should deliver an indication of market value. However, the sources of data should reflect the market in which the asset is to be valued.

3.5 Portfolio Valuation

Since care properties are often transacted as portfolios instead of single assets (KTI Online 2020), it is useful to provide a brief overview on portfolio valuation. According to international valuation standards (IVSC 2013, p. 16), association with other related assets contributes to the value of an individual asset. In relation to care properties, aggregation of assets may provide the prospective buyer either a critical mass or a foothold in desirable locations.

The benefits of combining assets relate to reduction of costs and risks and increase in revenue. Due to these synergies, the value of a group of assets may exceed the sum of individual assets. The basis of value determines whether the synergies should be considered in the valuation. (IVSC 2017 p. 26-27.) For most bases of value, entity-specific factors that are not available to participants in general are not included in a market-based valuation. Both increase and reduction in value resulting from the combination of similar assets into a portfolio is considered a factor potentially unavailable to participants. Discovering whether the factors are in fact specific to the entity, or available to others in the market, requires a case-by-case examination. (IVSC 2017, p. 26.) IVSC (2017, p. 24) points out that the highest and best use of an asset valued on a stand-alone basis may differ from its highest and best use as a part of a combination of assets.

International valuation standards require a clear identification of the asset or assets being valued (IVSC 2017, p. 10) and compliance with this requirement necessitates the valuers to differentiate between a valuation of individual instruments and a portfolio. When there is ambiguity in defining a single asset or property, RICS (2014, p. 111) recommends the valuer to resort to grouping of the assets in the manner most applicable in the case the assets would be sold. According to RICS (2014, p. 112) it is allowed to identify groups within a portfolio and value them separately, providing the valuer records the relevant assumptions in the valuation report. These assumptions may have a material effect on the valuation of a portfolio. For instance, placing a whole portfolio on the market at once might flood the market and cause a reduction in values. On the other hand, the opportunity to acquire a certain portfolio may also produce a premium. This means that the value of the whole could be higher than the sum of individual parts, and vice versa. (RICS 2014, p. 112.)

The purpose of valuation is of pivotal importance in relation to the reductions and allowances made in the valuation, and the statements included in the reports. In cases where the portfolio under valuation is expected to remain in the existing ownership is very different from a the one where the same portfolio was to be valued for potential divestment purposes. While in the first

case, making any reductions or allowances in the valuation to reflect the possible effect of flooding the market would be inappropriate, in the latter the possible adverse effect on individual properties caused by the whole portfolio being placed on the market simultaneously should on the contrary be accounted for. Nonetheless, relevant statements to that effect should be recorded in either case. Furthermore, RICS notes that valuers are to ascribe the market value either to a single entity or to individual properties or assets, depending on the assumed treatment the market would make. (RICS 2014, p. 112-113.)

3.6 Bias and Uncertainty in Property Valuation

It is unlikely for two valuers to arrive at a same market value for a property at a given value date. The property has one correct market value, so theoretically the other value can be considered "incorrect" – if not both of them. The difference between the estimated market value and the undetected market value is known as appraisal error. However, appraisal error is not an indicator of the valuer's inability to appraise the market value for a property, nor is it a sign of the valuer's negligence during the valuation process. For example, the value may be distorted if the market-derived information lags the actual market value. (Geltner et al 2014, p. 636-637.)

The ability of two or more valuers to deliver the same market value on a given value date is called valuation variation (Crosby 2000, p. 131) and must not be confused with valuation (or appraisal) bias. Yiu et al (2006, p. 321) divide appraisal bias into systematic and random bias. Systematic bias is defined as a continuous over- or underestimation of asset value. Systematic bias is a result of three components: behaviour contention, options-value, and different-base-of-valuation. Bias originating from behavioural aspects include, for example, knowledge of a prior valuation (Havard 1999, p. 365), emphasizing information received through personal contacts instead of more generally available market data (Gallimore et al 2000, p. 605) and customer's influence on the valuation (Levy & Schuck 2005). Options-value hypothesis has mainly been used to explain the bias in land value. Valuers who resort to normative valuation methods in land appraisals may overlook the options value, which the developers have managed to include in their bids. (Yiu et al 2006, p. 332-333.) The third hypothesis to explain systematic bias lies in the different points of view on what to include and what to neglect in the appraisal. Appraisers derive the market value of the asset based on market-determined, exogenous variables that should not reflect any special interests with special byers. By contrast, buyers are inclined to adopt a wider scope determining the acceptable "buyer value" of the asset. (Yiu et al 2006; Adair et al 1996.)

Random bias is in part a repercussion of the valuer's inclination to either diminish or to augment the variance of true market values (Yiu et al 2006, p. 321). According to Geltner (Yiu et al, p. 322) the margin of error between the actual transaction price and the estimated value is caused by three elements: appraisal smoothing (downside bias of variance), overreaction (upside bias of variance), and purely random error (noise). Fisher et al (1999, p. 13-14) observed how during economic expansion, appraised assets are undervalued, and during downturn, overvalued. The difference between the transaction price and the appraised value interacts closely with the direction of the market in terms of asset appreciation and as a result, appraised values lag market prices.

Like appraisal bias, also valuation uncertainty has been the topic of several studies (e.g. Mallinson & French 2000; Brown et al 1998; Meszek 2013). Market values are professional estimates of what the property is expected to transact for at a given value date. However, as is generally recognised, all valuations have degree of uncertainty in them, and the opinion on the market value is formulated on the assumptions adopted and assessed by the valuer. (Mallinson & French 2000; Brown et al 1998.) The valuer must assess both the market and the subject property in relation to the market, decide what variables to include in the valuation process, how to weigh them and finally conclude the most probable estimate on the market price. Uncertainty of the market conditions or the subject property translate further into uncertainty of the valuation outcome. (Mallinson & French 2000.) Yet, Brown et al (1998) concluded that "uncertainty in valuations is a normal part of an active market and is consistent with valuers having different views concerning market expectations", whereas errors in valuation were considered much more serious issue than uncertainty.

Clearly, valuation process by which the market value is delivered, is a subjective one and susceptible to distortion and uncertainty. Behavioural research on the real estate discipline begun in the 1990's as an analysis of appraisal process and later evolved onto role perception of the appraiser and client influence (Wolverton 2000). While the main focus of the behavioural property studies has been on appraisal bias, recent studies indicate a development towards mitigating the occurrence of bias and a deeper understanding of the valuers' train of thought. Tidwell and Gallimore (2014) examined the influence of a support tool on real estate valuations to eliminate or subdue bias. Their study indicates that decision support technology has subdued systematic anchoring bias, as appraisal judgements are facilitated by more extensive information. Bellman and Öhman (2016) studied thought patterns of Swedish authorised property appraisers and discovered the aggregated thought patterns of the appraisers to be fairly complex and to demonstrate relatively strong homogeneity. Future will show how the behavioural research of valuation will advance.

4 Empirical Research

The empirical part of the study consists of thematic interviews of several authorized property valuers operating in commercial real estate services companies in Finland. This chapter begins with an introduction to thematic interviews as a research method. Next, the interview sample of the study is discussed in more detail. The chapter concludes with an overview on the research strategy and methods of analysis.

4.1 Thematic Interviews

The three traditional research strategies to conduct an empirical study are quantitative research, qualitative research, and empirical research (Hirsjärvi et al 2007, p. 130-131). For the purposes of this study, a qualitative research strategy was selected. The differences between quantitative and qualitative research have been a subject of debate for a long time and the distinctive features of both approaches have been presented as dichotomic lists and tables to clarify the disparities. However, in practice it can prove to be challenging to draw a clear line between qualitative and quantitative study. Moreover, the two research strategies are often complementary to each other. The premise of qualitative research is to describe real life with the awareness of the reality being manifold. Overall, qualitative research aims to rather reveal or disclose facts instead of verifying existing statements. (Hirsjärvi et al 2007, p. 132-133; p. 157.) Unlike in quantitative studies, qualitative research does not aim to test a theory as such but pursues to develop theory by analysing the data (Saaranen-Kauppinen & Puusniekka 2006, p. 13-14). Since qualitative research does not aim to discover and explain statistical relationships, a relatively small amount of data will suffice. However, while the sample size is small, it should also be focused. (Saaranen-Kauppinen & Puusniekka 2006, p. 49.)

The most prominent method for collecting data in qualitative research are interviews (Saaranen-Kauppinen & Puusniekka 2006, p. 52). Interviews are fundamentally based on the same principles and assumptions as all other conversations that take place in different social functions. However, unlike casual conversations, interviews have a specific purpose and the participants possess distinct roles: the interviewer is the less-informed party while the interviewee holds the information; the interview is arranged at the interviewer's instigation; and the researcher usually directs or steers the conversation towards certain topics. Unlike mundane conversations, interviews have specific goal and the purpose of the research guides the interview. (Ruusuvuori & Tiittula 2009, p. 22-23.)

Conventionally interviews are categorized according to the degree of leeway given to the interviewee and the precision in which the questions are set. Following this typology, the three types of interviews are unstructured, semi structured, and structured. Additionally, depending on how many interviewees there are present simultaneously, interviews can be either individual or group interviews. (Saaranen-Kauppinen & Puusniekka 2006, p. 53-59.) Hirsjärvi and Hurme (2008, p. 43) remark that the terminology regarding interview types is diverse, even confusing, and while the same terms may be used to refer to completely different methods, also similar methods may have multiple names. However, structured, standardized interviews constitute a class of their own, whereas all other types of interviews form another category. Structured interviews use questionnaires as research instruments to collect information from the

respondents. This method allows for low-effort and sensible quantification of the collected data and is most suitable for testing formal hypothesis. The latter category includes for instance unstructured, semi-structured and thematic interviews. Unstructured interviews lack a predetermined structure, the questions are open-ended, and the setting is informal and conversational. (Hirsjärvi & Hurme 2008, p. 44-46.) In semi-structured interviews the questions are same to all respondents but instead of providing for a fixed set of alternative responses, the interviewees formulate their own answers in their own words (Eskola & Suoranta 1998, p. 86). Characteristic to all semi-structured interviews is to have some aspect of the interview predetermined, while the rest remain open (Hirsjärvi & Hurme 2008, p. 47).

The chosen data collection method for this study is thematic interviews. Thematic interviews are semi-structured interviews that rest on and proceed with specific key themes (Hirsjärvi & Hurme 2008, p. 47-48). However, unlike in structured interviews, thematic interviews do not follow the detailed form and sequence of predetermined interview questions. Instead, the interviewer has a written aid to make sure that all the themes will be covered while the order and the extent of the answers may vary from one interview to another. (Eskola & Suoranta 1998, p. 86.) Thematic interviews are considered a good fit for studying phenomena that are relatively unknown; it targets particular themes and allows the interviewees to express their thoughts, interpretations and views without the restraints that are imposed by more structured interview types (Saaranen-Kauppinen & Puusniekka, 2006, p. 55-56). Valuing care properties has not been a topic of previous academic research and thus thematic interviews were considered a good approach to collect data for the study.

The compilation of interview questions was the same for all interviewees, as all the respondents were property valuers. The questions aimed at disclosing how care properties and their valuation differs from that of other commercial properties. Appendix 1 presents the interview questions.

4.1.1 Interview Sample

In total, 10 interviews representing 6 companies were conducted, and some interviewees representing the same company were interviewed together. The interviewees were chosen based on their experience and knowledge on care property valuation and care property markets. The companies the interviewees represent include not only the large companies in property valuation in Finland but also a few smaller ones. Table 6 exhibits the interviewees and the companies they represent. All the respondents are authorized property valuers (AKA) and five of them are Chartered Members (MRICS).

Potential respondents were first approached via e-mail buy the researcher. The interviews were conducted by the researcher in February and March 2020. Five interviews were conducted face-to-face and three via Microsoft Teams meeting. Four of the physical interviews took place at the representative's office, and one in a group work facility in Espoo at Otaniemi Learning Center. Three representatives were interviewed in Helsinki, two in Espoo, one in Lahti and one in Espoo. The interview questions were sent to the interviewees in advance by e-mail to allow them to prepare for the interview and to save time during the actual interviews.

All interviews were executed in Finnish and recorded in order to minimize the effort during the interviews and to facilitate a free flow of conversation. Prior to commencing the actual

interview, the respondents were reminded of the interviews being recorded and asked for their permission to have their names published in the diploma thesis. The duration of the interviews varied from 55 minutes to two hours. The interviews were partly transcribed to facilitate the analysis and access to the results.

Table 6. List of the interviewees for the study.

Name	Company	Title and qualifications	Experience in years
Juha Kirvesmies	Realia Management	Senior Valuer MRICS, AKA	30
Matti Vierula	Kiinteistötaito Peltola & Co	Valuer MRICS, AKA	17
Olli Kantanen	CBRE Finland Oy	Head of Valuation & Advisory AKA	13
Seppo Koponen*	Gem Property Oy	CEO, Partner AKA, MRICS, CIS HypZert (MLV), REV	32
Kaj Söderman*	Gem Property Oy	AKA, MRICS	13
Tero Lehtonen	JLL Finland	CEO JLL Finland AKA, MRICS	20
Ville Kangaskokko	Realia Management	Valuer AKA	4
Jukka Uusitalo	Realia Management	Senior Valuer AKA	12
Ilkka Nissinen**	Catella	AKA	11
Leena Smeds**	Catella	AKA, MRICS	21

** The two representatives of Gem Property Oy, Koponen and Söderman, were interviewed simultaneously.*
*** The two representatives of Catella, Nissinen and Smeds, were interviewed simultaneously.*

4.2 Research Strategy and Methods of Analysis

Selecting the interviewees was based on their applicability and ability to answer the questions regarding care properties and their appraisal. The experience and expertise of the interview sample on the phenomena studied is instrumental in ensuring a professional view on care property valuation. Thematic interviews as a research method permit the interviewer to set additional and clarifying questions to the respondents. The interview questions were first

examined by the instructor of the diploma thesis, Henri Timperi, and by the supervisor, professor Kauko Viitanen.

All the interviewees gave their consent to recording the interviews, which adds to the reliability of the study. The conversational nature of the interviews was maintained throughout the interview and the obtained amount of information exceeds that of needed for the purposes of this study. The audio recordings of the interviews were listened to and partially transcribed. The citations and opinions submitted in the diploma thesis are anonymous. Hesitation and unnecessary repetition have been removed.

The sample for the interview is limited (n=10) and represents only a small proportion of the population. Hence, extrapolating the results to apply to the entire population of valuers must be done with care. Moreover, the generalization is applicable only in the Finnish care property markets since the legislation and regulation affecting care properties vary greatly by country. Although the respondents are mainly located in the Helsinki Metropolitan area, the overall geographical coverage in Finland contributes to the external validity of the research.

The interviews provide a method to create a picture on the thoughts, perceptions, experiences and feelings of the respondent (Hirsjärvi & Hurme 2008, p. 41). According to Rossman and Rallis (2012, p. 176), qualitative research interviews aim at understanding the viewpoints of individuals, deepen understanding, create rich and descriptive information, gain insight from the reasoning of the interviewees and learn more from the context. Alasuutari (1999, p. 149) points out that it is typical for the respondents in thematic interviews to formulate a preconception of the objectives and agendas of the questions. Consequently, the respondents determine what to elicit and what to withhold during the interview. This diploma thesis has not aspired to uncover any actual market information, nor any other information that would be considered confidential or too detailed from the interviewees' point for view.

The analysis of the responses has pursued to construct a general view on the studied phenomenon, and disconnected extracts from the interviews have been avoided. A greater emphasis has been given to matters accentuated or prioritized by the respondent.

5 Results of the Thematic Interview

This chapter presents the results from the empirical research and the conclusions from the empirical study. The results are categorised in eight separate subchapters to facilitate the reader's analysis on different aspects of care property valuation. This categorization does not entirely follow the grouping presented for the interview questions (Appendix 1) but is rather a classification of the results that according to the researcher provides the best conception of the studied phenomena with minimum repetition. However, it should be noted that due to reasons deriving from the nature of the research topic, there was no avoiding some overlapping in the subchapters.

5.1 Valuation Methods

In all types of care, the characteristics of the property under valuation determine the valuation approach used. According to the respondents, a vast majority of the care properties are owned by professional property investors that base their revenue logic on the rental return generated by the operator, making income approach the most suitable valuation method. Current care property investment market is largely composed of new buildings with long lease agreements, and the value of the property is based on its future cash flows, requiring the use of cash-flow method. However, considering the whole care property market, a substantial proportion of the properties comprise older stock usually owned by municipalities and to a lesser extent by third sector actors. As there are no lease agreements in municipally owned and operated properties, income approach is inoperative, whereas market approach provides an adequate tool for value estimation. Valuations of municipally owned properties were more frequent in 2018 boosted by the social and healthcare reform and declined once the reform was suspended.

All respondents viewed market approach as an applicable way to estimate market values for care properties when income approach is not an option. There are, however, some caveats regarding the market information. First, transaction prices alone do not necessarily provide adequate data on the comparables, as information regarding rents, lease agreement maturities and number of customer places, for example, are missing. Second, as operators have grown and pursued a position in the local care market, they may have acquired properties that are no longer fit for care use. In these cases, the actual object of transaction may have been the contract of service instead of the property. Linked transactions do not provide market-based data on the transacted properties and hence, relying on these observations may produce too optimistic values, unless the effect of the business contract is eliminated. Furthermore, as some valuers mentioned, care properties purchased by large operators may be demolished and replaced with new ones soon after the transaction.

Cost approach was unanimously considered the least appropriate method for valuing care or any other property types, as the superiority of income approach and market approach over cost approach was regarded irrefutable. Some respondents described cost approach to be if anything a supplementary or a control method to be employed along with the primary one. One respondent argued that although cost approach method has been disparaged by valuers, it is increasing in relevance as a risk control method – the risk control element of cost approach method was recognized also by some other valuers, but no elaborate speculations on the matter

were risen. Furthermore, cost approach was generally considered rather complicated and arduous compared with the other two approaches and to have too many uncertainty factors. Granted that cost approach will produce a value, it may be far from market value.

The only potential situations for the use of cost approach as a primary valuation method were determining insurance indemnity and possibly when valuing new care properties; and even then, it would be used as a reference for income value. According to the interviews, for new properties cost value and income value should be relatively close to one another, as the rent is expected to reflect the construction costs; if the income value is considerably higher than construction costs, the valuer may need to review particularly rents and yield requirement and reconsider whether they are market based.

While many interviewees favoured the use of income approach, several valuers considered advisable to use market approach, and even cost approach, as a control method. Typically, in care the significance of the lease agreement is emphasised, and market approach serves as a sanity check for income-based value. In general, the valuers viewed that different valuation approaches should produce results within a similar value range.

5.2 Market Information on Care Properties

The availability and accessibility of care property market information was considered approximately the same as for other commercial property types, and the lack of transparency is evident also regarding this property sector. On all commercial property transactions, the reported information is minimized as has been and is the way of the trade. As presented earlier when discussing the market approach and comparable transactions, transaction prices alone tell very little if anything of the property's attributes and as much of the service agreement potentially connected to the transaction.

Several respondents mentioned portfolio transactions to be more typical for care properties. The value class of a single care property is often low and attracting investor interest requires larger portfolios than in other property types, where the value class of a single property is typically higher. Commercial property market as such is non-transparent, and portfolio transactions add to this – attributes of an individual asset remain a mystery, and market observations are not practical. Furthermore, portfolio transactions were mentioned to present a challenge for valuation, as value formation is based on valuation of a single asset. In recent years the market has been active, demand has exceeded supply, and yield requirements have compressed, so when an opportunity to purchase a larger portfolio emerges the transaction price of the portfolio may exceed the sum of the individual assets. An individual asset would be less appealing and transact at a lower price than as a part of the portfolio. In this vein, one of the respondents speculated if it would be more appropriate to value care properties with the portfolio premium, given the current market practices.

Also the young age of the care property investment market was said to reflect on the characteristics of the available information. The historical data on care properties is much more limited and since most of the investment stock is comprised of new properties with long lease agreements, market observations on properties with lease agreements expiring in six years' time,

for example, are thus far non-existent. Hence, there is no knowing how the yield requirement will behave with the shortening maturity, nor is there knowledge on the market rents for such properties after the first lease agreement has expired.

5.3 Basis of Value

As expected, the interviewees regarded the basis of value to be market value in care property appraisal. Most of them did not even consider the possibility of resorting to alternative bases of value. Even so, one of the respondents challenged the valuers' convention to almost exclusively apply market value, as it is not necessarily the value sought by the customer and suggested presenting another value in parallel with market value in such situations. Market value is objective, but transaction decisions are subjective, and hence, for example investment value may serve the customer's need better than market value.

According to the respondents, estimating a market value for new and modern care properties is under prevailing market conditions possible and quite accurate, with little difference compared to other commercial property types. The market for modern care properties is nowadays considered functioning and liquid, whereas over a decade ago when first care properties were being valued in Finland, the market was much more illiquid and valuation accuracy lower. It was stated that due to the novelty of the market, the market practices are still evolving but the basic fundaments do exist.

However, there was variance in the interviewees' outlooks on market for obsolete properties: while some considered there to be a market for care properties regardless of their age and condition, others argued that some properties are potential market dropouts – no use, no market. Especially the municipally owned older stock which does not meet the regulatory requirements, was viewed challenging to value, since private operators are not willing to acquire them – market penetration situations notwithstanding – and the market for such properties is virtually non-existent. The opposing opinion was that even the poorest of care properties will eventually transact, albeit at lower prices and after longer marketing periods. In the context of obsolete care properties a few respondents contemplated the use of liquidation value in forced sale-like situations.

The personal experience of the valuers was clearly reflected in their answers. Valuers whose experience in care property valuations comprised mainly investor stock were more optimistic about also the poor properties to have a market and potential buyers, whereas those who had more experience in valuing the substandard properties tended to think the opposite. Based on the interviews, the proportion of the obsolete stock of the valuations is much smaller than that of the new, up-to-date one. It was mentioned that the poorer, shunned property stock is not as often the object of valuation since the owners are usually able to conclude without the valuation that demolition is their only option. Then again, as many of the properties are municipally owned, a valuation was said to be often required for official decision making.

5.4 Assumptions in Care Property Valuation

According to the interviews, the assumptions made in care property valuation are for the most part the same as for other property types: market rents, void premises, rent free periods, capital

expenditure, repair cost provision for aging properties, yield requirements et cetera. Some respondents pointed out that the cash flow statement in care property valuation is often more straightforward to compose than when valuing other property types. Typically, the statement includes one row as care properties are usually occupied by a single tenant.

As stated by one interviewee, valuation is in principle fact based, and that is also how valuation is largely conducted. However, it is typical for unfinished care properties or care property projects at the brink of commencement to land on a valuer's desk. Speculative construction in care sector is according to the interviews non-existent and as care properties are popular investment objects, the properties can be purchased from construction companies already before the actual construction has even started. The valuation is based on the assumption that the property is finished at the given value date and conforms with the regulations. Furthermore, the lease agreement is also assumed, and the rents are tied to the construction costs, albeit fluctuating ones.

According to the interviewees, the most common assumptions regard the regulatory requirements and the continuity of the operation, as there may be uncertainty concerning them. Oftentimes, the properties are assumed to fulfil the requirements and the operation is supposed to be accepted by authorities, and to continue in the same vein in the future. While the regulatory requirements are likely to be fulfilled in new investor properties, some properties do not conform to the norms and may have some deficiencies. This as such does not prevent the properties from being used for care purposes and as long as the property is functional, it is usually assumed to able to serve the operator's and residents' needs. However, the valuer must record the detected imperfections and defects. One of the respondents suspected that assuming a steady, uneventful continuance for the operation is in fact a bigger assumption than realised.

The respondents pointed out how in care property valuation making an accurate scenario on the future market position of a care property is unreliable due to the unknown effect of the operation environment. One of the interviewees concluded, that rather than making suppositions on the future, it is assumed that the current use is allowed from here to eternity and the uncertainty stemming from the possible changes in regulation and its effect on the current use of the property is accounted for in the yield requirement.

5.5 Importance of Location

According to the interviewed valuers, location as a value factor for care properties is important, but less so than for retail properties, for example. Moreover, there are notable differences regarding location between subsectors of care properties, which is an outcome of demographics and the characteristics of the target groups. Reletting and residual risk of different care properties depend greatly on location.

In elderly care and overall in sheltered housing, macro location was considered more important than micro location, which is often secondary. Based on the interviews, it can be concluded that in care, prime properties comprise of new elderly care buildings with long lease agreements in an aging locality at the outskirts of the city centre. Demographics even in small localities create demand for sheltered housing for the elderly; in fact, one of the respondents contemplated that the age pyramid in small towns is potentially more appealing than in growth centers. Some

valuers mentioned that the difference in values between a sheltered home for the elderly in Helsinki Metropolitan area and one in Northern Finland is far smaller than that of retail properties in corresponding macro locations. Micro locations for elderly care are usually more remote, peaceful and possibly close to nature than commercial properties in general are. Properties for substance abuse rehabilitees are also preferably on more isolated locations.

Many of the attributes regarding location apply to sheltered homes for the disabled and people with mental problems. However, as was disclosed in the interviews, there are differences in how the public looks on these target groups. Whereas the elderly is more or less sympathised, many residents would be set against mental patients living in the same neighbourhood. It was pointed out that as elderly care does not rouse objection, it can be placed in central locations where it may have potential in other use, too. Then again, it was also presented that both families and the elderly find similar living environments pleasant. This allows for combining different user groups and multi user properties.

According to the interviews, assessing the significance of macro location of day care properties is much more pronounced than in elderly care. As mentioned earlier, while elderly care is needed nationwide, the demand for day care centers is lesser in small localities in depopulating areas. New residential areas in small localities may be in need of a day care centre for the moment, but as a result of migration to growth centers, the facilities may be vacated after serving one generation of young families. Thus, investors are prone to refrain from investing in day care properties in depopulating areas, and if they do, the yield requirements are remarkably higher to compensate for the increased reletting and residual risks.

According to the respondents, the micro location of a day care centers is similarly crucial and ideally less remote than in elderly care. Furthermore, accessibility is significant for day care properties, as they are visited twice a day: first, the children are left for day care, and second, when they are being collected. The respondents viewed that the best locations are close to the users – in residential and workplace areas – near connections and routes, or in centers or close to them. One of the interviewees noted that the requirement for accessibility is a significant factor in zoning decisions.

Location requirements for hospitals were clearly more difficult to formulate than for the other care property types above. As one of the respondents pointed out, the macro location of a hospital is often a result from political or strategic decision making, and the preference of the location is not always unambiguous to the valuer. However, it was emphasized that hospitals must have good accessibility and conditions to operate without disturbance – the operation determines a good micro location, not the property. Furthermore, hospitals are also work places and central hospitals may employ thousands of people. For health centers and medical clinics, central and easily accessible locations were considered desirable to allow for easy client visits.

Albeit considered secondary, there is no ignoring the importance of location in care property valuation, even if it may call for additional deliberation. In effect, one of the respondents presented an outlook on the concept of location that is worth considering not only in the context of care but in other property types as well: location of a property is not a single parameter, but instead affiliated with accessibility and purpose of use, and the combination of these three must

be optimal. Yet, as pointed out by another valuer, since all properties are not freely positioned due to opposition, operators and investors cannot escape the location risk entirely.

5.6 Typical Clients and Purpose of Valuation

The interviewees revealed two main client groups that order valuations on care properties: investors – both domestic and foreign – and municipalities or municipally owned companies. By and large, the valuation procedure is the same regardless of the client, but the stock under valuation is usually very different as the properties owned by professional investors are newer and modern, and municipally owned typically older and out of date.

According to the interviews, the number of valuations ordered by municipalities, municipally owned companies and other bodies under municipalities, peaked around 2018. In virtually all cases the assignment originated from the social and healthcare reform and valuations were ordered to serve as a tool for decision making in rearranging different functions in local governments and outlining their property policies, for example. Particularly small municipalities in rural areas were concerned that along with the reform, the regional government will decide to concentrate social and healthcare services somewhere else, leaving the municipalities with vacated care properties. The ambition of the municipalities has been to remove the risk by selling the properties to investors. Also, municipalities were interested in knowing for how much the property would transact and how much they would make in the process for constructing a new building.

Also the third sector – organizations, foundations, associations, parishes – was mentioned, but they clearly represent a marginal group compared with investors and municipalities. It was suspected that the typically old age of the properties together with less professional property maintenance has led to substantial renovation needs and for third sector properties, the motivation for ordering a valuation is often for determining collateral value. According to the interviews, owner-occupiers are a thin crowd among the clients to order a valuation, as are property developers.

The investor-clients to order a valuation on care properties were generally stated to be the same as in other property types: specialised investors, property funds, property companies and institutional investors. However, it is typical that while the investor – or user – orders the valuation, the actual user of the valuation may be and often is someone else, of which auditors and financial institutions are the most typical. Financial statements obligate the investors to supply them with valuations and financing calls for an objective estimate on the investment in transaction cases. The need for valuations often involves internal purposes and supporting decision making, on quarterly basis or more seldomly. Updating valuations cover mainly assessing the market sentiment and since the valuation interval is quite short, there are rarely significant changes.

The respondents recognised there to be differences between clients regarding the extent and particularity of the valuation report. For example, while big investors and care property funds who deal with large volumes of properties and are well informed on the market, prefer short, condensed reports, valuation reports on single properties for user-occupiers require a more detailed description on the market, background information and how the value has been derived.

Albeit the logic and valuation principles will remain the same regardless of the client or the property, tailoring the valuation report was considered customer service in all property types, not just in care property valuation. However, it was mentioned that especially for international investors, the valuation conducted by a local valuer accompanied by relevant background information produces critical knowledge and insight on the local care property markets and the politically bound operation environment. Cross border investments in for instance office or retail properties are unlikely to require as extensive preliminary knowledge as care property investments.

5.7 Authorative Regulation and Functionality of Premises

According to the interviews, in many ways regulation epitomizes the nature of care properties and distinguishes it from other commercial property types. One of the respondents enlightened the difference with a following example: regarding office properties, knowing the market will suffice; when valuing restaurants, the valuer needs also to be informed on pertinent legislation regarding the restaurant business; in care property valuation, the competence need is substantially more extensive as in addition to the current market conditions, the valuer needs to understand demographics, political environment, building regulation and legislation, among others. Furthermore, regulation exposes care properties to faster obsolescence and may altogether impede it being used for care purposes, making it very different from other commercial properties.

The regulations dictate the type of care that can be provided in the facilities, and particularly elderly care was considered highly regulated. The overall sentiment among the respondents was that regulatory requirements for care properties are strict and meticulous, and a few interviewees believed them to become even more so. Some valuers expressed their frustration regarding the regulations; while they can be complicated to interpret and at times confusing and even conflicting, they have a strong impact on valuation and on the value.

One of the interviewees presented a possible explanation for the confusion regarding the interpretation of regulatory requirements. The Ministry of Social Affairs and Health does not give unambiguous instructions, but they do produce letters of direction for the Regional State Administrative Agencies to apply. It was concluded that albeit the Ministry does not have legislative power, the authorities in Regional State Administrative Agencies parallel these instructions with legislation according to their own interpretations of the given directions. According to the information relayed to another valuer, the regulations were not intended to be implemented as strictly as they currently are. A considerable amount of the regulation is coercive and while many interviewees approved the need for regulation as a means to protect and benefit the most vulnerable of the society, it was also argued that there may not be a need for regulations. The fact that many of the regulations are not easily accessible was considered a nuisance.

It was stressed on several instances in the interviews that there is no escaping the regulation, and the risk for the post-agreement period is very different for properties complying with the regulations than for those that do not. Investors are cautious of acquiring properties that no longer measure up to the regulatory requirements due to increased reletting risk and residual risk, even if they were currently functional. According to the interviewees, age of the building

is often a critical factor in the care sector, as it is considered as a direct indication of its attributes regulation-wise – the higher the level of regulation, the more highlighted the importance of age becomes.

According to the interviews, new care properties meet the regulatory requirements and as a rule, and the older stock does not. From the valuer's perspective, however, the so-called borderline properties were said to be the most challenging to appraise even to the most experienced of valuers. Properties constructed in 2000-2010 can be problematic, as they are unlikely to fully conform with the authorative regulation, but the operator and the residents find the property to meet their needs. The valuer must decide how opinionated to be regarding the regulations and whether the next user will be able to operate in the facilities; as mentioned in Chapter 2.6, either National Supervisory Authority for Welfare and Health or Regional Administrative Agency issues the permit for properties used for care purposes. When the operator changes, the premises are re-inspected. Properties built in the 21st century may have to undergo complete renovations in order to serve as a care property at the change of tenant, and the high renovation costs may repel the buyers. Hence, only a ten-year old property can be useless.

The functionality of the care properties can be primarily viewed from three aspects; from the investor's, operator's, and the resident's or the customer's point of view. Depending on the care type, also friends and relatives compose a potential stakeholder group. According to the interviews, modern and effective facilities enable a higher rent, as operators can house more residents, patients or customers in space-efficient facilities than in less effective ones. Typically the operator retains the entire property to itself along with the operating costs; in addition to maximising income, the operators pursue to minimise costs by eliminating redundant space. Furthermore, the functionality of the facilities has a considerable impact on personnel sizing and for example in sheltered housing, having the same amount of bed places in a two-story building requires more personnel than in a one-story building. Then again, the number of bed places and capacity is regulated by authorities, as is sometimes the required minimum amount of nursing staff.

Clearly integrating functions and people into smaller premises makes sense from the investor's point of view; operators are willing to pay more for effective and functional facilities, resulting in a higher value for the investment. Operators on their part benefit from reduced costs. However, it was noted in the interviews that effectivity and compliance to regulation is not necessarily an advantage for the resident or other users of the facilities.

5.8 Target Groups and Subcategories of Care

The target group has a significant impact on the demands and characteristics on the facilities designed and built for them to occupy, and the regulatory differences between target groups are considerable. Based on the interviews, the rule of thumb is that the more intensive the care, the higher the level of regulation regarding the properties. For instance, authorative regulation for day care centers is deemed far more lenient than that of intensive elderly care.

While the target group and the type of care do not influence the choice of valuation approach, they do affect the valuation inputs and the parameters. The variation in risk profiles depending on the target group was mentioned several times during the interviews, and the main explanatory

factor behind this revelation condenses primarily into demographics. Elderly care is considered the spearhead of care property investments since demographics shows a current and future need for it, whereas the declining birth rate causes reservations among investors to invest in day care properties. This uncertainty reflects on the yield requirements that are higher for day care than for elderly care properties. Nonetheless, it was also noted by many interviewees that even the elderly will eventually run out in some localities.

Also, the juxtaposition of residual risk between elderly care and day care properties surfaced frequently during the interviews; whereas sheltered homes for the elderly will be in demand nationwide for the next decades to come, day care centers will face a very different volume in customer base outside growth centers. Majority of the respondents considered the residual risk to be higher for day care properties than for elderly care. On the other hand, it was also argued that higher authorative regulation regarding elderly care will lead to a higher residual risk compared with day care centers.

Disabled people and people with mental problems are a marginal target group in the care sector compared with the elderly and children in early childhood education and were not mentioned as often in the interviews. However, one of the valuers commented on the notable similarities in care properties for the elderly, disabled and mental health rehabilitees. When asked, other valuers agreed with this observation – in many ways the apartments and the buildings are designed and constructed following the same dimensioning, accessorising and accessibility regulations. This allows for a larger variety of options regarding potential target groups than in other care subsectors. Naturally this applies only for new properties and the same cannot be concluded with respect to the older stock. New sheltered homes may also have potential as regular apartments, but obviously this is only feasible in regions with demand for additional housing. Nonetheless, a few examples of sheltered homes with a conversion option to a regular apartment building were mentioned in the interviews. In such projects the dilemma is how to control for the additional costs inflicted by the conversion option element, without counteracting the business via increased rents. Yet, valuers seemed to be more sceptical than trusting regarding the use of sheltered homes in regular housing.

According to the interviews, child welfare properties constitute a distinctive subclass of their own. The floor plan is completely different from sheltered homes, there are non-ensuite rooms with shared bathrooms and alternative uses are scarce. Furthermore, the locations are usually more isolated, especially in rural areas. Due to higher risks, yield requirement for child welfare property investments was considered higher than for elderly care. What was said about child welfare properties, applies largely on hospitals and health centers, too. Based on the interviews, the latter two subcategories were among the rarest ones and seldomly objects of valuation.

One special feature in care property valuation is the basic unit according to which the asset is being valued. Usually the unit value used in commercial property valuation is based on square meters, and this applies to some care properties, such as health centers. Then again, as was expressed on several occasions in the interviews, the value of an area unit as such is not necessarily an informative indication of value, whereas capacity is. By capacity the valuers refer to for instance bed places in a sheltered home and maximum head count in a day care centre; in short, capacity tells how many people the property can serve. Square meters do contribute to the

capacity, but how the space is arranged and divided solves how efficiently it can be employed and also affects the amount of nursing personnel.

5.9 Conclusions of the Interviews

Valuing care properties is largely based on the cash-flows they generate, making income approach the most applicable method of choice. Market approach is employed less, but it is recognised as a good option for user-occupied properties and serves as a sanity check for income-based value. In care property markets, the difference between investor-owned and occupier-owned properties is quite clear and present two totally different markets. This is typical for care property markets and not as distinctive in other property types, where the investors are more inclined to acquire also poorer properties. However, this was not considered a problem among valuers.

As one asset class, care properties are very heterogeneous, varying from vacant and unusable to fully occupied, modern premises and from children's day care centers to sheltered homes and health centers. Yet, the investor owned segment is considered very homogenous. No doubt there are trends in other commercial property types too, but in the investor care properties the similarity of one property with another was regarded notable. This stems from the regulation and the operators' objective to minimise costs. Care properties constructed according to the same regulations and operator-friendly space solutions contribute to a uniform care property stock. The question remains, if the current solutions of today will serve the needs of the future.

For many of the care property types the size of the property is only a partial truth, as in sheltered housing and in day care, for instance, the number of beds and capacity is more essential. Although the importance of space efficiency was recognised also for other commercial property types, such as in offices, some respondents stressed how in care the actual capacity has more relevance than square meters as such. The operators' requirements for space efficiency may have led to residents and clients being cared for in more compact facilities. It is typical that the operator is responsible for the operation costs of the property, making leasing the property more attractive than managing it. Then again, in valuation the missing information regarding the actual operating cost may exclude data on the condition of the building and possible future renovations in cases where the property maintenance has been poorly.

The care property market is still a young one with limited history. The missing timeline that is present in all other major commercial property types leaves the valuers as well as other players with little information on the potential cyclical developments of care property markets. Once the care property market matures, there will be more information available on how the yield requirements behave in the course of time, to what extent the potential reletting risks actualize and what is the range of a market rent for a property with an expired lease agreement, for example. Currently the challenges in obtaining practical market information derive in addition to the young age of the market also from the non-transparent nature of the property market, and it does not treat care properties any differently. However, the fact that care properties are often transacted as portfolios, adds to this. Furthermore, care property transactions may in addition to the actual property include other elements as well, typically the service agreement. Valuers should refrain from relying too much on the market information before verifying their adequacy to avoid too optimistic market values.

Location as a value factor depends largely on the subtype of care. For example, macro location of day care properties is much more pronounced than in elderly care, as the demand for the latter is considerable nationwide, whereas for day care centers it is not. On the other hand, more remote micro locations for elderly care are allowed, while day care properties have stricter criteria for accessibility. Reletting and residual risk of different care properties depend greatly on location, although there is little information on either for the current investment property stock.

The significance of regulation is very prevalent regarding care properties and their valuation. If a property does not meet the required norms for its intended use, a new operator will not be able to use it in its service provision and thus, the steady cash flows that are the investors' incentive for requiring these properties, are lost. Normative failures as such are not necessarily an impediment in terms of functionality, but they increase the future risk of the property becoming redundant. From the valuer's perspective, decisions regarding the property's regulatory requirements are at times a blind spot as there is no knowing for certainty, whether the requirements are met or not. Surprisingly enough, a fairly new building can be obsolete in terms of regulatory requirements. The valuers must resort to their own insight and record the made assumptions on the properties' regulatory status in the valuation reports. None of the other property types is subject to similar regulation, nor becomes obsolete as rapidly.

While the lifespan of buildings is usually several decades, care properties are at risk of having considerably shorter lifespans due to changing regulations. This aspect conflicts with sustainable development, a timely topic regarding also property industry. As mentioned in the latest report on the state of our built environment (ROTI 2019), property and development industry directly address 11 out of 17 United Nations sustainable development goals. According to Lorenz and Lützkendorf (2008) sustainable development will not leave the profession of property valuation unaffected, as they argued in 2008 (p. 2013) that "the perception of property as a commodity is changing to emphasise sustainable design features and performance characteristics as important determinants of a property's value, thereby requiring new ways of assessing worth and value."

Apart from the challenges brought about by regulation, care property valuation does not differ from that of other commercial property types according to the respondents. In fact in investor market, estimating market value for care properties is usually a straightforward process due to the typical attributes the investor stock possesses. Lease agreements are long, the properties are leased to a single tenant, and especially in quarterly updates, valuation comprises largely of a review on the market sentiment. The caveat, however, is that the value development of a property can be obscured.

The drivers for care property development are non-cyclical, and do not follow for instance the economic development as rigorously as other property types tend to. Thus far, the focus has primarily been on demographics that has created strong incentives for increasing the stock for elderly care. Furthermore, advancing urbanisation in Finland leaves some regions and localities withering while others thrive. It must however be noted that even though the elderly is currently found in abundance in all localities, future need for elderly care is likely to be focused on growth centres in the long run.

6 Conclusions

This chapter sums up the study by discussing the results and conclusions of the research. Furthermore, the chapter will assess the quality of the study and discloses proposed further research. The Chapter begins with results and conclusions regarding the research questions, literature and the interviews. In the second subchapter, the quality of the study is assessed by analysing the validity and reliability of the research, along with other possible defects regarding its quality. The third subchapter outlines topics for proposed further research related to care properties and care property markets.

6.1 Results and Conclusions

The aim of the study was to provide an overview of the Finnish care property market, its operation environment and to detect how the characteristics of this diverse property segment affect valuing care properties. These objectives are presented in the first chapter of the thesis as three research questions. The first research question regards care property markets in Finland with an objective to disclose what is characteristic of care property markets. As the perspective of the thesis is that of the property valuer's, the latter two research questions focus on the special features of valuing care properties and the possible challenges in care property valuation.

The literature review of the research comprises a section regarding Finnish care property markets, presenting a framework in which the care property markets operate and describing the diverse nature of care property segment. Moreover, an outlook on real estate valuation theory and valuation methods is given to complete the literature review. While the primary objective of the literature review on Finnish care property markets was to address the first research question, interviews were conducted to resolve the other two. Thematic interviews of the study were based both on the special characteristics of care properties disclosed by the literature review, and on valuation methodology.

To address the first research question, care properties compose one sector in the unity of the entire real estate and property market and share several common characteristics with other property types. However, institutional elements are a major influence in the care property market. Authorative regulation concerning the services and the facilities employed in social welfare and healthcare service provision is typical for care properties. Furthermore, the strong involvement of services and real estate in care property industry is quintessential to the segment, although with varying emphasis depending on the subsegment of care.

Care property market is still a relatively young one compared to other major commercial property markets, having a history of only a few decades as an investment property segment. Also, care property investment market is quite thin, as the annual transaction volumes of care properties have during the past decade constituted a maximum of 10.3 per cent of the total commercial property transaction volume. Nevertheless, care properties have clearly claimed a position as an investable market segment for professional investors. Care properties are often transacted as portfolios, as the transaction prices of single properties are fairly low. However, it should be noted that regardless of the increased investor presence in care property markets, local authorities are still a major player in the industry as owners and users of the properties.

The drivers for care property development differ from other property types. Where the demand for office space often derives from economic activity and population growth, space demand for sheltered housing originates from demographics. However, sheltered housing is only one care property segment, albeit a major one, when considering the entire scope of care properties urbanisation is another major influence that emerges to explain care property development.

Definition of a healthcare property varies depending on the source. While properties with a healthcare function are by definition included in healthcare properties, the term "care" appears to cover a wide range of properties with residential, healthcare and social service delivery elements. In this thesis, the term "care property" is employed to cover all properties that serve in the provision of social welfare and healthcare services in Finland.

The interviews supported the findings considering the first research question. Relating to the definition of care, many respondents emphasised sheltered housing, particularly for the elderly, as "care" when delivering their answers. This may be explained by sheltered housing for the elderly to have been the spearhead of care property investments. The other end of the figurative range of care, childcare, was also mentioned frequently, possibly indicating an increased investor interest in this subtype.

Research question two regarded the special features of care properties. Authorative regulation epitomizes the nature of care properties. Moreover, as the care property segment is very diversified, the target group has a significant impact on the demands and characteristics on the facilities designed and built for them to occupy, and the regulatory differences between target groups are considerable. The rule of thumb is that the more intensive the care, the higher the level of regulation regarding the properties. Furthermore, regulation exposes care properties to faster obsolescence and may altogether impede it being used for care purposes, making it very different from other commercial properties.

Another interesting feature care properties possess relate to space efficiency. In care property valuation, the value of an area unit as such is not necessarily an informative indication of value for some property types, whereas capacity – for instance bed places in a sheltered home and maximum head count in a day care centre – is. Square meters do contribute to the capacity, but how the space is arranged and divided solves how efficiently it can be employed and also affects the amount of nursing personnel, and consequently, the operator costs. Then again, the number of bed places and capacity is regulated by authorities, as is sometimes the required minimum amount of nursing staff.

In care property markets, the difference between investor-owned and occupier-owned properties is quite clear and present two totally different markets. This is typical for care property markets and not as distinctive in other property types, where the investors are more inclined to acquire also poorer properties. The investor owned segment is considered very homogenous, whereas the occupier-owned care property stock is more heterogeneous, in addition to being older too.

Albeit regulation and capacity related aspects in care property valuation bring about their own challenges for valuers, the fundaments and methods according to which they are appraised are the same as in any commercial property valuation. In investor market, estimating market value

for care properties is usually a straightforward process due to the typical attributes the investor stock possesses. Lease agreements are long, the properties are leased to a single tenant, and especially in quarterly updates, valuation comprises largely of a review on the market sentiment. A vast majority of care properties are owned by professional property investors and largely composed of new buildings conforming to the regulatory requirements. However, considering the whole care property market, a substantial proportion of the properties comprise older stock usually owned by municipalities and to a lesser extent by third sector actors. Municipally owned and operated properties are typically valued by employing market approach, as there are no lease agreements.

The third research question pertained to the challenges met in valuing care properties. The characteristics of care property markets present some issues in care property valuation. Although the availability and accessibility of care property market information was considered approximately the same as for other commercial property types, the young age of the market reflects on the characteristics of the available information. The historical data on care properties is much more limited and since most of the investment stock is comprised of new properties with long lease agreements, there are no observations on the potential cyclical elements of the market. Once the care property market matures, there will be more information available on how the yield requirements behave in the course of time, to what extent the potential reletting risks actualize and what is the range of a market rent for a property with an expired lease agreement, for example.

The fact that care properties are often transacted as portfolios increases the already poor transparency of the market, as the attributes and the transaction price of a single asset remain unknown. On the other hand, transaction prices alone tell very little if anything of the property's attributes, nor of the service agreement potentially connected to the transaction.

As a rule, new care properties meet the regulatory requirements whereas the older stock does not. From the valuer's perspective, however, the so-called borderline properties were said to be the most challenging to appraise. Properties constructed in 2000-2010 can be problematic, as they are unlikely to fully conform with the current authorative regulation, but the operator and the residents find the property to meet their needs. The valuer must decide how opinionated to be regarding the regulations and whether the next user will be able to operate in the facilities; the risk for the post-agreement period is very different for properties complying with the regulations than for those that do not.

Regulations have a strong impact on valuation and on the value, but they can be complicated to interpret and at times confusing and even conflicting. The most common assumptions in care property valuation regard the authorative regulation and the possibilities to continue the service provision in the facilities. Furthermore, properties that do not conform with the regulatory requirements are not necessarily unfit for their intended use and as long as the property is functional, it is usually assumed to able to serve the operator's and residents' needs. However, the valuer must record the detected imperfections and defects in the valuation report.

6.2 Quality of the Study

Assessing the quality of a study is a significant part of the research process. In quantitative research, the central concepts in determining the standards of a study are validity and reliability, and the views on the applicability of these two concepts in evaluating the quality of qualitative research are varied (Saaranen-Kauppinen & Puusniekka 2006, p. 25). Eskola & Suoranta (2003, p. 208) point out that qualitative research has been criticized for having too obscure reliability criteria and suspect this argumentation to derive at least in part from fact that in qualitative research, data analysis and assessment of reliability cannot be as clearly separated as in quantitative research.

Validity of a research refers to the adequacy of the study – is it conducted thoroughly, are the results accurate and has the researcher interpreted them correctly (Saaranen-Kauppinen & Puusniekka 2006, p. 25). Yin (2009, p. 40) introduces three types of validity: construct validity, internal validity and external validity. Construct validity defines validity as the research methods' ability to measure what it is meant to, internal validity assesses whether the results of an empirical study originate from the variables that are expected to affect them, and external validity describes how well the conclusions of a research are applicable outside the context of that study (Yin 2009, p. 41-43).

The chosen research methods for this study are literature review and thematic interviews. The literature review aims to produce an understanding of the studied phenomena. However, literature – academic or other – on Finnish care properties or care property markets in Finland is limited, causing serious constraints on compiling a comprehensive literature review and reducing the construct validity of the study. Nonetheless, the existing literature has laid a foundation for drafting the themes and interview questions. Furthermore, the methodology and the research problem has been discussed with the thesis instructor during different phases of the study.

While the objective in qualitative research is rarely a straightforward description of reality, the validity of research is largely based on the researcher's capabilities to construct interpretations that coincide with those of the research subjects, and on the capacity to produce a comprehensible account of these constructions of reality to others. (Saaranen-Kauppinen & Puusniekka 2006, p. 25). As Saaranen-Kauppinen and Puusniekka (2006, p. 25) point out, language has a considerable effect on the validity of a research. The interviews were conducted in Finnish, which is the native language of the researcher and all the interviewees; thus, language-related misunderstandings or misinterpretations in the interviews are unlikely to have taken place. Furthermore, all interviews were recorded to minimise the risk of misinterpretations, which will add to the internal reliability of the study.

The interview sample comprised of ten respondents, all of which had several years in experience in property valuation and at least a national authorization (AKA). As the sample size represents only a small proportion of the population, extrapolating the results to apply to the entire population of valuers must be done with care. Moreover, the generalization is applicable only in the Finnish care property markets since the legislation and regulation affecting care properties vary greatly by country. Although the respondents are mainly located in the Helsinki Metropolitan area, the overall geographical coverage in Finland contributes to the external

validity of the research. Due to the considerable regulatory element in the studied phenomena, it is possible that in the course of time the results may no longer apply.

Reliability of the research refers to the consistency of a measure and it indicates the extent to which the results of the study can be reproduced under identical research conditions. Evaluating the reliability of a qualitative study can be divided into three elements: quixotic reliability, diachronic reliability, and synchronic reliability. Quixotic reliability assesses the applicability of the research method for particular circumstances, diachronic reliability relates to the stability and similarity of the results over time, and synchronic reliability refers to the similarity of results within the same time period. (Saaranen-Kauppinen & Puusniekka 2006, p. 25-26.)

The main research method for this study, thematic interviews, are considered a good fit for studying phenomena that are relatively unknown. Since valuing care properties has not been a topic of previous academic research, thematic interviews can be considered a good approach to collect data for the study. Furthermore, also the interview sample can be considered to add to the reliability of the results as the interview sample included respondents from six companies, all of which are active in care property valuation. The results from the interviews comprehend a significant amount of reiteration, alluding to a sufficient number of interviewees.

The anonymity of the interviews was discussed with the respondents prior to the interviews to encourage free expression of perception and sentiment. However, there is a chance that as company representatives, the respondents may be more conservative in their responses than during informal conversations covering the same themes.

6.3 Further Research

Care properties are a diversified and distinctive property type that has not been widely studied, in part due to its relatively young age. However, as this study indicates, care properties are an integral part of the Finnish property market, having considerable importance as an investment asset class and as an instrument for delivering social and health care services. Regardless of the valuation aspect being the spearhead of the research, this study has also pursued to acquaint the reader with the care property market as a whole despite the dominance of elderly care properties within all areas of the sector. Hence, this study lays a foundation for future research on different subtypes of care properties.

The interviews conducted for the purposes of this study surfaced several potential research topics, including regulation, zoning, urbanization, conversions, and mixing public and private use properties. The regulatory framework determines the use and applicability of care properties in ways tenuous to other property types and its instrumental role was discussed to great lengths with the interviewees. Given the heterogeneity of the care property segment, the valuers should be informed of several different space type specific regulations when determining their acceptability for their intended use. Yet, there appears to be uncertainty and even a certain level of ambivalence regarding the interpretation of the authorative regulations, and the access to the needed regulations is difficult to come by. Based on the interviews, there is a need for improving transparency and harmonizing the regulations, and objective research on the topic would provide useful tools in reaching this goal.

The municipalities in Finland are responsible for arranging land use and the zoning monopoly gives them considerable power of decision regarding the existence and location of care properties, too. The operation environment of local governments is dynamic since urbanization, migration and demographic developments change the needs of the municipality and affect the zoning decisions. The hardship of predicting the future, however, poses challenges for the urban structure, as the locations previously suitable for care properties might change with urbanization. Conducting research on zoning for care purposes could provide interesting and useful information on the grounds on which these decisions are made under current circumstances, how the forecasts on future development affect the decisions, and are there any lessons learnt from the past.

Alternative uses and conversions were frequently mentioned in the interviews in the context of residual risk and reletting risk. It would be worthwhile to explore the possibilities and obstacles of care property conversions to produce information on the critical factors that influence the use of redundant care properties for other purposes. Regulation contributes to the more rapid aging of care properties and research on the matter could assist in discovering how the lifespan of care properties could be lengthened in alternative uses, when updating the properties to meet the effective regulations is not a feasible option.

During the recent years, we have witnessed some examples of public and private use properties being located in the same building. Shopping centers have been the forerunners of mixing public and private use properties: Iso Omena occupies city library, Mall of Tripla in Pasila has a parish center and shopping center Hertsi in Herttoniemi provides several public services: in addition to city library and youth club, the service provision extends to day care services and intensive sheltered housing for the elderly. The phenomenon is still a new one, but the years to come will show if it will develop into a bigger trend and open new possibilities for care service provision in a larger context. Research is however needed to ensure the best and most profitable use of care properties that are being redefined.

Spring 2020 will remain in history for the covid-19 virus that caused a pandemic with severe global implications in all areas of life. From the real estate sector's point of view, the crisis had different consequences depending on the property sector. While hotels and shopping centers were presumably hit the hardest, public use properties, in which care properties are included, were estimated to survive with lesser damage. (KTI 2020a.) However, within the care sector the ramifications of the covid-19 were varied; corona crisis contributed to the corporate restructuring of private day care center operator Touhula when the pandemic decreased the number of children attending early childhood education in Touhula's units, creating severe short-term difficulties for the already unprofitable operation (Touhula 2020). The impacts of covid-19 have potential to initiate many interesting research topics within the real estate sector alone, including the robustness of care property investments against global crisis.

References

Adair, A., Berry, J. & McGreal, S. 1996. Valuation of residential property: analysis of participant behavior. Journal of Property Valuation and Investment, Vol 14, No. 1, pp. 20-35. ISSN 0960-2712.

Anttonen, A. & Karsio, O. 2017. How marketisation is changing the Nordic model of care for older people. In: Martinelli, F., Anttonen, A. & Mätzke, M. (eds.): Social Services Disrupted. Changes, Challenges and Policy Implications for Europe in Times of Austerity. New Horizons in Social Policy series, pp. 219-238. ISBN 9781786432100.

Anttonen, A. & Meagher, G. 2013. Mapping marketisation: concepts and goals. In: Meagher. G. and M. Szebehely (eds): Marketization in Nordic eldercare: a research report on legislation, oversight, extent and consequences, Stockholm Studies in Social Work 30, Stockholm: Stockholm University, pp. 13-21. ISBN 978-91-637-3213-3.

Asumisen rahoitus- ja kehittämiskeskus ARA (Housing Finance and Development Center of Finland). 2015. Rakennuttamis- ja suunnitteluopas. (Guide for building and planning.) [E-publication]. Last accessed 30 June 2020. Available at: http://www.ara.fi/download/Suunnitteluopas_2013/2d274119-2a14-44b7-a758-38acb26cab95/22532

Asumisen rahoitus- ja kehittämiskeskus ARA (Housing Finance and Development Center of Finland). 2019a. ARA-asuntokannan kehitys 2000-luvulla. Selvitys 1/2019. (Development of ARA housing stock in the 21st century. Report 1/2019.) [E-publication]. Last accessed 16 April 2020. Available at: https://www.ara.fi/fi-FI/Tietopankki/Tilastot_ja_selvitykset/ARAasuntokanta/ARAasuntokannan_kehitys_2000luvulla(49013)

Asumisen rahoitus- ja kehittämiskeskus ARA (Housing Finance and Development Center of Finland). 2019b. Rakennuttamis- ja suunnitteluopas. (Guide for building and planning.) [E-publication]. Last accessed 16 April 2020. Available at: https://www.ara.fi/fi-FI/Tietopankki/Oppaat/Rakennuttamis_ja_suunnitteluopas(40242)

Asumisen rahoitus- ja kehittämiskeskus ARA (Housing Finance and Development Center of Finland). 2020a. About ARA. Last accessed 15 April 2020. Available at: https://www.ara.fi/en-US/About_ARA

Asumisen rahoitus- ja kehittämiskeskus ARA (Housing Finance and Development Center of Finland). 2020b. ARA housing stock. Last accessed 15 April 2020. Available at: https://www.ara.fi/en-US/ARA_housing_stock

Asumisen rahoitus- ja kehittämiskeskus ARA (Housing Finance and Development Center of Finland). 2020c. Investment subsidies for special-needs groups. Last accessed 15 April 2020. Available at: https://www.ara.fi/en-US/Housing_finance/Investment_subsidy_for_specialneeds_groups

AVI 2020a. Regional State Administrative Agencies. Regional State Administrative Agencies. Last accessed 6 February 2020. Available at: https://www.avi.fi/en/web/avi-en/

AVI 2020b. Regional State Administrative Agencies. Family and Social Services. Last accessed 15 April 2020. Available at: https://www.avi.fi/en/web/avi-en/perhe-ja-sosiaalipalvelut

AVI 2020c. Regional State Administrative Agencies. Health care. Last accessed 15 April 2020. Available at: Healthcare. https://www.avi.fi/en/web/avi-en/healt-care

Bellman, L. & Öhman, P. 2016. Authorised property appraisers' perceptions of commercial property valuation. In: In: Journal of Property Investment & Finance, Vol. 34 No. 3, 2016, pp. 225-248. ISSN 1463-578X.

Brown, O. 2008. Migration and Climate Change. No. 31. IOM Migration Research Series. International Organization for Migration (IOM) [E-publication]. ISSN 1607-338X.

Brown, G., Matysiak, G. & Shepherd, M. 1998. Valuation uncertainty and the Mallinson report. In: Journal of Property Research 01 January 1998, Vol. 15(1), pp. 1-13. ISSN 0959-9916.

Brueggeman, W. B. & Fisher, J. D. 2008. Real Estate Finance and Investments. 13th ed. Boston: McGraw-Hill. 688 p. ISBN 978-007-125919-4.

Crosby, N. 2000. Valuation accuracy, variation and bias in the context of standards and expectations. In: Journal of Property Investment & Finance, Vol. 18 No.2, 2000, pp. 130-161. ISSN 1463-578X.

Docrates 2020. Docrates. About Doctrates._Last accessed 28 March 2020. Available at: https://www.docrates.com/en/about-docrates/

Dunse, N., Jones, C. & White, M. 2010. Valuation accuracy and spatial variations in the efficiency of the property market. Journal of European Real Estate Research 11 May 2010, Vol.3(1), pp. 24-45. ISSN 1753-9269.

Eiran sairaala 2020. Eiran sairaala. Palvelut. (Eira hospital. Services.) Last accessed 28 March 2020. Available at: https://www.eiransairaala.fi/fi/Palvelut/Leikkaukset-HUS-palvelusetelilla

Eskola, J. & Suoranta, J. 2003. Johdatus laadulliseen tutkimukseen (Introduction to qualitative research). 6th ed. Vastapaino. Tampere. 268 p.

Evli 2020. Vaihtoehtorahastot. (Alternative Funds.) Last assessed 20 July 2020. Available at: https://www.evli.com/tuotteet-ja-palvelut/vaihtoehtorahastot/rahastot

eQ 2020. eQ Hoivakiinteistöt. (eQ Care properties.) Last assessed 20 July 2020. Available at: https://www.eq.fi/fi/funds/eq-hoivakiinteistot

Finder.fi 2020. Maakuntien tilakeskus Oy. Talous- ja yritystiedot. (Company information.) Last accessed 2 May 2020. Available at:

https://www.finder.fi/Sosiaalipalvelut/Maakuntien+tilakeskus+Oy/Helsinki/yhteystiedot/3158875

Finnish Education Evaluation Center. 2019. Tilastoraportti 2019 varhaiskasvatuksen järjestämisestä. (Statistical Report on Early Childhood Education 2019.) Last accessed 13 May 2020. Available at: https://karvi.fi/publication/tilastoraportti-2019-varhaiskasvatuksen-jarjestamisesta/

Fisher, J., Gatzlaff, D., Geltner, D. & Haurin, D. 2003. Controlling for the Impact of Variable Liquidity in Commercial Real Estate Price Indices. Real Estate Economics June 2003, Vol.31(2), pp. 269-303.

Fisher, J., Miles, M., Webb, B. 1999. How reliable are commercial appraisals? Another look. Real Estate Finance Fall 1999, Vol.16(3), pp. 9-15. ISSN 0748-318X.

Gallimore, P., Hansz, J.A., Gray, A. 2000. Decision making in small property companies. Journal of Property Investment & Finance 01 December 2000, Vol.18(6), pp. 602-612. ISSN 1463-578X.

Geltner, D., Norman, M., Clayton, J. & Eichholz, P. 2014. Commercial Real Estate Analysis and Investments. 3rd ed. Mason, OH, USA: OnCourse Learning. 826 p. ISBN 978-1-133-10882-5.

Hankinnat.fi. 2020. Palvelujen käyttäjien tarpeiden huomioiminen sote-hankinnoissa. (Considering user-needs in social welfare and healthcare procurement.) Last accessed 27 April 2020. Available at: https://www.hankinnat.fi/sote-hankinta/palvelujen-kayttajien-tarpeiden-huomioiminen-sote-hankinnoissa

Havard, T. 1999. Do valuers have a greater tendency to adjust a previous valuation upwards or downwards? Journal of Property Investment & Finance 01 October 1999, Vol.17(4), pp. 365-373. ISSN 1463-578X.

Helsingin Sanomat. 2019. Kotimaa. Sote. Jättihanke odottaa lisäohjeita ministeriöltä. (Social welfare and healthcare reform. A massive project awaits for further instructions from the Ministry.) Published 17 March 2019.

Helsinki. 2018. Päivähoito- ja nuorisotilojen vaatimukset ja valvonta. Ympäristöpalvelut. (Requirements and control of daycare and youth facilities. Environmental Services.) Last accessed 13 May 2020. Available at: https://www.hel.fi/static/ymk/esitteet/paivahoitotilat.pdf

Hirsjärvi, S., Remes, P. and Sajavaara, P. 2007. Tutki ja kirjoita (Research and write). 13th ed. Tammi. Helsinki. 448 p.

IVSC. 2013. International Valuation Standards 2013. International Valuation Standards Council. 112 pages. ISBN 978-0-9569313-0-6.

IVSC. 2017. International Valuation Standards 2017. International Valuation Standards Council. 121 pages. ISBN 978-0-9931513-0-9.

Jokilaakson sairaala 2020. Jokilaakson sairaala. Tietoa meistä. (Jokilaakso hospital. About us.) Last accessed 27 March 2020. Available at: https://www.jokilaaksonsairaala.fi/tietoa-meista

Jokinen, E. 2018. Sosiaali- ja terveydenhuollon kokonaisulkoistukset. Sopimukset, kustannuskehitys ja saatavuus. (Total Outsourcing of Social Welfare and Healthcare Services. Contracts, Cost Development and Accessibility.) Tampereen yliopiston yhteiskuntatieteiden tiedekunta. [E-publication]. Last accessed 26 April 2020. Available at: https://www.hyvinvointiala.fi/wp-content/uploads/2018/11/sosiaali-ja-terveydenhuollon-kokonaisulkoistukset-selvitys-2018.pdf

Jyväskylän kaupunki. 2018. Lasten päivähoitotilojen suunnitteluohje. Kaupunkirakenteen toimiala, Ympäristöterveydenhuolto. (Planning instructions for day care facilities. Branc of urban structure, Environmental healthcare.) Last accessed 13 May 2020. Available at: https://www.jyvaskyla.fi/sites/default/files/atoms/files/paivahoitotilojen_suunnitteluohje_2018.pdf

Karsio, O. & Anttonen, A. 2013. Marketisation of eldercare in Finland: legal frames, outsourcing practices and the rapid growth of for-profit services. In: Meagher. G. and M. Szebehely (eds): Marketization in Nordic eldercare: a research report on legislation, oversight, extent and consequences, Stockholm Studies in Social Work 30, Stockholm: Stockholm University, pp. 85–126. ISBN 978-91-637-3213-3.

Karsio, O. & van Aerschot, L. 2017. Vanhuspalvelut ja valinnanvapaus – johtavien viranomaisten näkemyksiä palvelusetelistä (Elderly care and freedom of choice – Viewpoints of leading officials on service vouchers). Yhteiskuntatieteiden tiedekunta, Tampereen yliopisto. In: Gerontologia Vol. 31(3), 2017. pp. 165-180. https://dx.doi.org/10.23989/gerontologia.63443

Kasso, M. 2014. Kiinteistönvälitys ja -arviointi. (Real estate brokerage and valuation.) e-Book. Talentum Media. 2nd ed. 284 p. ISBN 978-952-14-2160-0 PDF.

Kiljavan Sairaala Oy 2020. Kiljavan sairaala. (Kiljava hospital.) Last accessed 28 March 2020. Available at: http://www.kiljavansairaala.fi/kiljavan_sairaala.asp

Korhonen, E., Niemi, J., Ekuri, R., Oksanen, R., Miettinen, H., Parviainen, J., Haapanen, A. & Patanen, T. 2018. Kuntien rakennuskannan kehitys- ja säästöpotentiaali. Valtioneuvoston selvitys- ja tutkimustoiminnan julkaisusarja 5/2018 (Development and saving potential in the municipalities' building stock. Publications of the Government´s analysis, assessment and research activities 5/2018) [E-publication]. Last accessed 2 May 2020. Available at: https://tietokayttoon.fi/julkaisu?pubid=24402

Korhonen, L. 2016. Investing in Care Home Properties in Finland. Master's Thesis. Aalto University, Department of Built Environment. Espoo. 64+2 pages.

KTI 2015. The Finnish Property Market 2015. [E-publication]. Last accessed 3 May 2020. Available at: https://kti.fi/the-finnish-property-market-2015/

KTI 2020a. Markkinakatsaus. Kevät 2020. (Market Review. Spring 2020.) [E-publication]. Last accessed 25 May 2020. Available at: https://kti.fi/en/publications/market-reports-and-reviews/

KTI 2020b. The Finnish Property Market 2020. [E-publication]. Last accessed 25 May 2020. Available at: https://kti.fi/en/publications/market-reports-and-reviews/

KTI Online 2020. Last accessed 15 April 2020. Available at: https://kti.fi/online/

KTI 2019. Finnish Property Market 2019. [E-publication]. Last accessed 6 May 2020. Available at: https://kti.fi/wp-content/uploads/The-Finnish-Property-Market-2019.pdf

Kuntaliitto 2020a. Association of Finnish Municipalities. Asumispalvelut ja laitoshoito. (Housing services and institutional care.) Last accessed 21 April 2020. Available at: https://www.kuntaliitto.fi/sosiaali-ja-terveysasiat/sosiaalihuolto/iakkaiden-palvelut/asumispalvelut-ja-laitoshoito

Kuntaliitto 2020b. Association of Finnish Municipalities. Kaupunkien ja kuntien lukumäärät ja väestötiedot. (Number of cities and municipalities and population information.) Last accessed 20 April 2020. Available at: https://www.kuntaliitto.fi/tilastot-ja-julkaisut/kaupunkien-ja-kuntien-lukumaarat-ja-vaestotiedot

Lamminmäki, K., Laitinen, L., Pekkala, H., Sievänen, L. & Sievänen, M. 2015. ARAn erityisryhmäkohteiden tilamitoitus. Asumisen rahoitus- ja kehittämiskeskuksen raportteja 2:2015 (Space dimensioning for ARA Special needs groups. Reports of Housing Finance and Development Center of Finland 2:2015). Suomen Yliopistopaino Oy – Juvenes Print, Tampere 2015. ISBN 978-952-11-4541-4. 73 s.

Laposa, S. P. & Singer, H. N. 1999. Size, Scope and Performance of the Seniors Housing and Care Industry: A Comparison With the Multifamily and Lodging Sectors. The Journal of Real Estate Portfolio Management 1 January 1999, Vol.5(3), pp. 211-224. ISSN 1083-5547.

Levy, D. & Schuck, E. 2005. The influence of clients on valuations: the clients' perspective. Journal of Property Investment & Finance 01 April 2005, Vol.23(2), pp.182-201. ISSN 1463-578X.

Lith, P. 2018a. Palveluasumisen markkinat Suomessa. Tilastollinen selvitys toimialan palvelukysynnästä, palveluntuottajista ja kiinteistöistä. Suunnittelu- ja tutkimuspalvelut Pekka Lith. (Markets for serviced housing in Finland. Statistical report on the service demand, service providers and the properties. Planning and research service Pekka Lith) [E-publication]. Last accessed 13 May 2020. Available at: https://www.hyvinvointiala.fi/palveluasumisen-markkinat-suomessa/

Lith, P. 2018b. Varhaiskasvatuksen markkinat. Raportti lastensuojelun asiakkaista, palveluntuottajista ja markkinoista tilastojen valossa. Suunnittelu- ja tutkimuspalvelut Pekka

Lith. (Markets for early childhood education. Statistical report on child welfare customers, service providers and markets from statistical point of view. Planning and research service Pekka Lith) [E-publication]. Last accessed 13 May 2020. Available at: https://www.hyvinvointiala.fi/raportti-lastensuojelun-asiakkaista-palveluntuottajista-ja-markkinoista-tilastojen-valossa-15-3-2018/

Lorenz, D. & Lützkendorf, T. 2008. Sustainability in property valuation: theory and practice. In: Journal of Property Investment & Finance 26 September 2008, Vol. 26(6), pp. 482-521. ISSN 1463-578X.

Lynn, D. & Wang, T. 2008. The U.S. Senior Housing Opportunity: Investment Strategies. Real Estate Issues Summer 2008, Vol.33(2), pp. 33-51. ISSN 0146-0595.

Maakuntien tilakeskus. 2020. Valtiovarainministeriö ja Maakuntien tilakeskus solmivat palvelusopimuksen tilatiedosta. (Ministry of Finance and Maakuntien tilakeskus to conclude a service agreement on space information.) Last accessed 2 May 2020. Available at: https://www.maakuntientilakeskus.fi/valtiovarainministerio-ja-maakuntien-tilakeskus-solmivat-palvelusopimuksen-tilatiedosta/

Mallinson, M. & French, N. 2000. Uncertainty in property valuation. The nature and relevance of uncertainty and how it might be measured and reported. In: Journal of Property Investment & Finance, Vol. 18 No. 1, 2000, pp. 13-32. ISSN 1463-578X.

Mehiläinen 2020. Mehiläinen. Company information. Last accessed 28 March 2020. Available at: https://www.mehilainen.fi/en/company-information

Meszek, W. 2013. Property valuation under uncertainty. Simulation vs strategic model. In: International Journal of Strategic Property Management, Vol. 17(1), 2013, pp. 79-92. ISSN 1648-9179.

Ministry of Finance 2015a. Kuntien itsehallinnolliset tehtävät ja niiden laajuus. VM:n julkaisu 40/2015. (Survey of local self-government duties. Publications of the Ministry of Finance 40/2015) [E-publication]. Last accessed 20 April 2020. Available at: https://vm.fi/dms-portlet/document/0/394807

Ministry of Finance 2020a. Local government's duties and activities. Last accessed 20 April 2020. Available at: https://vm.fi/en/local-government-s-duties-and-activities

Ministry of Finance 2020b. Peruspalvelujen tila 2020. Ikä- ja aluerakenteen muutoksessa, kysynnän ja kustannusten paineessa. Valtiovarainministeriön julkaisuja 2020/26. (The state of basic services 2020. Amidst the change of age and regional structure, pressured by demand and costs. Publications of the Ministry of Finance 2020/26) [E-publication]. Last accessed 20 April 2020. Available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162160/VM_2020_26.pdf?sequence=1&isAllowed=y

Ministry of Social Affairs and Health. 2020a. Hospitals and specialiced medical care. Last accessed 26 March 2020. Available at: https://stm.fi/en/hospitals-and-specialised-medical-care

Ministry of Social Affairs and Health. 2020b. Primary health care. Last accessed 26 March 2020. Available at: https://stm.fi/en/primary-health-care

Ministry of Social Affairs and Health. 2020c. Social and health services – Responsible agencies. Last accessed 14 April 2020. Available at: https://stm.fi/en/social-and-health-services/responsible-agencies

Ministry of Social Affairs and Health. 2020d. Tulevaisuuden sosiaali- ja terveyskeskus 2020–2022. Ohjelma ja hankeopas. Sosiaali- ja terveysministeriön julkaisuja 2020:3. (Future Health and Social Services Centres 2020-2022. Programme and related Project Guide. Publications of the Ministry of Social Affairs and Health 2020:30) [E-publication]. Last accessed 29 April 2020. Available at: http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162004/STM_2020_3_j.pdf?sequence=1&isAllowed=y

Ministry of the Environment. 2011. Palveluasumisen julkisen rahoituksen linjauksia (Alignments on the public financing of sheltered housing) [E-publication]. Työryhmäraportti 14.12.2010. Ympäristöministeriön raportteja 1/2011. Last accessed 3 May 2020. Available at: https://julkaisut.valtioneuvosto.fi/handle/10138/41463

~~MML. 2020. National Land Survey of Finland. Last accessed 6 February 2020. Available at: https://www.maanmittauslaitos.fi/en~~

Mueller, G. R. & Anikeeff, M. A. 2001. Real Estate Ownership and Operating Businesses: Does Combining Them Make Sense for REITs? The Journal of Real Estate Portfolio Management 2001, Vol.7(1), pp. 55-66. ISSN 1083-5547.

Nemlander, A. & Sjöholm, M. 2018. Selvitys palveluseteleiden käytöstä kuntien ja yhteistoimintaalueiden sosiaali-ja terveyspalveluissa - tilanne vuoden 2018 lokakuussa. (Report on the use of service vouchers in the provision of social welfare and healthcare services in municipalities and cooperation districts – status in October 2018). Kuntaliitto. Association of Finnish Municipalities. [E-publication] Last accessed 20 April 2020. Available at: https://www.kuntaliitto.fi/sites/default/files/media/file/181105_Palvelusetelikyselyn%20tulokset.pdf

Newell, G. & Marzuki, M. 2018. The increasing importance of UK healthcare property as an alternate property sector. In: Journal of Property Investment & Finance 6 August 2018, Vol. 36(5), pp. 466-478. ISSN 1463-578X.

Newell, G. & Wen Peng, H. 2006. The Significance of Emerging Property Sectors in Property Portfolios. In: Pacific Rim Property Research Journal 01 January 2006, Vol. 12(2), pp. 177-197. ISSN 1444-5921.

Newell, G. & Wen Peng, H. 2008. LPT Fund Manager Decision-Making in the Emerging Property Sectors. In: Pacific Rim Property Research Journal 01 January 2008, Vol. 14(2), pp. 222-232. ISSN 1444-5921.

Official Statistics of Finland 2019a. Classification of Buildings 2018. Last accessed 3 December 2019. Available at: https://www.stat.fi/en/luokitukset/rakennus/rakennus_1_20180712/code/06/

Official Statistics of Finland 2019b. Population projection. The decline in the birth rate is reflected in the population development of areas. Helsinki, Statistics Finland. [e-publication]. Last accessed 3 May 2020. Available at: https://www.stat.fi/til/vaenn/2019/vaenn_2019_2019-09-30_tie_001_en.html

Official Statistics of Finland 2019c. StatFin Statistical Database. Rakennukset ja kesämökit, Tilastokeskus. Rakennukset maakunnittain käyttötarkoituksen ja lämmitysaineen mukaan, 2005-2018. (Buildings and summer cottages, Statistics Finland. Buildings by county, purpose of use and heating substance). Last accessed 3 December 2019. Available at: http://pxnet2.stat.fi/PXWeb/pxweb/fi/StatFin/StatFin__asu__rakke/statfin_rakke_pxt_116g.px/

Official Statistics of Finland 2020a. Maahanmuuttajat väestössä. (Immigrants in the population.) Last accessed 18 July 2020. Available at: https://www.stat.fi/tup/maahanmuutto/maahanmuuttajat-vaestossa.html

Official Statistics of Finland 2020b. StatFin Statistical Database. Population according to age (1-year) and sex, 1970-2019. Last accessed 17 May 2020. Available at: http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__vrm__vaerak/statfin_vaerak_pxt_11rd.px/

Official Statistics of Finland 2020c. StatFin Statistical Database. Population by age and sex in population projections for different years, whole country. Last accessed 17 May 2020. Available at: http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__vrm__vaenn/statfin_vaenn_pxt_128t.px/

Official Statistics of Finland 2020d. StatFin Statistical Database. Toimipaikkalaskuri. (Places of business.) Last accessed 10 May 2020. Available at: http://pxnet2.stat.fi/PXWeb/pxweb/en/Toimipaikkalaskuri/Toimipaikkalaskuri__Toimipaikkalaskuri/tmp_lkm_kunta.px/

OP 2020. OP-Palvelukiinteistöt. (OP Serviced Properties.) Last assessed 20 July 2020. Available at: https://www.op.fi/henkiloasiakkaat/saastot-ja-sijoitukset/rahastot/kaikki-rahastot/op-palvelukiinteistot

Pagourtzi, E., Assimakopoulos, V., Hatzichristos, T. & French, N. 2003. Real estate appraisal: a review of valuation methods. Journal of Property Investment & Finance 01 August 2003, Vol.21(4), pp. 383-401. ISSN 463-578X.

Parhiala K. & Hetemaa T. 2017. Terveysasemien ulkoistukset Suomessa – Tilanne alkuvuonna 2017. (Outsourcing health centers in Finland – Status in early 2017). Tutkimuksesta tiiviisti 6, maaliskuu 2017. Terveyden ja hyvinvoinnin laitos, Helsinki. ISSN 2323-5179.

Pihlajalinna 2020a. Pihlajalinna. Pihlajalinnan historia. (History of Pihlajalinna.) Last accessed 29 March 2020. Available at: https://www.pihlajalinna.fi/tietoa-meista/pihlajalinnan-historia

Pihlajalinna 2020b. Pihlajalinna. Pihlajalinna julkisen sektorin kumppanina. (Pihlajalinna as a partner for the public sector.) Last accessed 29 March 2020. Available at: https://www.pihlajalinna.fi/tietoa-meista/pihlajalinna-julkisen-sektorin-kumppanina

Pohjolasairaala 2020. Pohjolasairaala. About us. Last accessed 27 March 2020. Available at: https://www.pohjolasairaala.fi/en/about-us/pohjola-hospital

Rakennustieto 2020a. Rakennustieto – Building Information. Last accessed 6 February 2020. Available at: https://www.rakennustieto.fi/index/english.html

Rakennustieto 2020b. Information Files. Last accessed 6 July 2020. Available at: https://www.rakennustieto.fi/index/english/productsandservices/informationfiles.html

Rissanen, P., Parhiala, K., Hetemaa, T., Kekkonen, R., Knape, N., Ridanpää, H., Rintala, E., Sihvo, S., Suomela, T. & Kannisto, R. 2020. Sosiaali- ja terveyspalvelut Suomessa 2018: Asiantuntija-arvio. Terveyden ja hyvinvoinnin laitos. (Social and health care services in Finland 2018: An Expert Assessment. Finnish Institute for Health and Welfare). [E-publication]. Last accessed 29 April 2020. Available at: http://urn.fi/URN:ISBN:978-952-343-474-5

ROTI 2019. Rakennetun omaisuuden tila 2019. Asiantuntijaraportti. (The state of built environment 2019. Expert report.) Last accessed 19 July 2020. Available at: https://www.ril.fi/media/2019/roti/roti_2019_raportti.pdf

Rovaniemi. 2017. Päiväkotien suunnitteluohje. Varhaiskasvastuspalvelut. (Design instructions for children's daycare centers. Early childhood education services.) Last accessed 13 May 2020. Available at: http://rovaniemi.cloudnc.fi/download/noname/%7Bfa591da5-6fe3-4c15-a099-2ec08e40abb3%7D/229088

RT Information File 103020. Available at: https://kortistot.rakennustieto.fi/kortistot/rt-kortisto

RT Information File 103083. Available at: https://kortistot.rakennustieto.fi/kortistot/rt-kortisto

RT Information File 93-11134. Available at: https://kortistot.rakennustieto.fi/kortistot/rt-kortisto

Saaranen-Kauppinen, A. & Puusniekka, A. 2006. KvaliMOTV – Menetelmäopetuksen tietovaranto (Methodology database) [E-publication]. Yhteiskuntatieteellinen tietoarkisto. Last

accessed 17 May 2020. Available at: https://www.fsd.uta.fi/fi/tietoarkisto/julkaisut/kvalimotv.pdf

Senaatti.fi. 2020. About us. Last accessed 2 May 2020. Available at: https://www.senaatti.fi/en/about-us/

Soteuudistus 2020. Government's draft legislation on the reform of healthcare, social services and rescue services circulated for consultation. Press release. Last accessed 30 June 2020. Available at: https://soteuudistus.fi/-/1271139/sosiaali-ja-terveydenhuollon-ja-pelastustoimen-jarjestamisen-uudistusta-koske-vat-hallituksen-lakiluonnokset-lausuntokierrokselle?languageId=en_US

Statistikmyndigheten SCB. 2020. Statistics Sweden. Utländska medborgare i Sverige. (Foreign citizens in Sweden.) Last accessed 18 July 2020. Available at: https://www.scb.se/hitta-statistik/sverige-i-siffror/manniskorna-i-sverige/utlandska-medborgare-i-sverige/

Suomen Terveystalo Oy 2020. Company. Terveystalo in Brief. Last accessed 27 March 2020. Available at: https://www.terveystalo.com/en/Company/Terveystalo-in-brief/

Taaleri Varainhoito 2020. Real estate investments. Last assessed 20 July 2020. Available at: https://www.taalerivarainhoito.com/en/investment-solutions/alternative-investments

Tampereen kaupunki. 2018. Päiväkotien suunnitteluohje. (Design instructions for children's daycare centers.) Last accessed 13 May 2020. Available at: https://www.tampere.fi/tiedostot/v/yHOp1Ill5/TRE_Paivakotien_suunnitteluohje_2018.pdf

Tervo, H. 2019. Kaupungistuminen kiihtyy – säilyykö alueellinen tasapaino? (Urbanisation Increases – Will the Regional Balance Remain?) In: Kansantaloudellinen aikakauskirja 2/2019 pp. 254-262. Last accessed 30 April 2020. Available at: https://www.taloustieteellinenyhdistys.fi/wp-content/uploads/2019/06/LOW3_31086773_KAK_sisus_2_2019_176x245-Copy-42-50.pdf

THL 2019. Finnish Institute for Health and Welfare. Lastensuojelu 2018. Tilastoraportti 23/2019. (Child Welfare 2018. Statistical Report 23/2019.) Last accessed 15 May 2020. Available at: http://www.julkari.fi/handle/10024/138211

THL 2020. Finnish Institute for Health and Welfare. Turvakotipalvelut. (Shelters for domestic violence.) (Last accessed 13 May 2020. Available at: https://thl.fi/fi/palvelut-ja-asiointi/valtion-sosiaali-ja-terveydenhuollon-erityispalvelut/turvakotipalvelut

Tidwell, A. & Gallimore, P. 2014. The influence of a decision support tool on real estate valuations. In: Journal of Property Research., 2014. Vol 31, No. 1, pp. 45-63. ISSN 1466-4453.

Touhula 2020. Uutiset: Touhula on jättänyt yrityssaneeraushakemuksen (News: Touhula has submitted a corporate restructuring application) Last accessed 25 May 2020. Available at: https://touhula.fi/uutiset/touhula-on-jattanyt-yrityssaneeraushakemuksen/

United Nations. 2019. Word Population Ageing 2019. Highlights. United Nations, Department of Economic and Social Affairs. New York. Last accessed: 9 February 2020. Available at: https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Highlights.pdf. ISBN 978-92-1-148325-3.

Valli-Lintu, A. 2017. Sote- ja kuntarakenteen pitkä kujanjuoksu. Kunnallisalan kehittämissäätiön Julkaisu 10 (The Long Trial of Restructuring Municipalities and Reforming Services. The Foundation for Municipal Development, Publication 10) [E-publication]. Last accessed 29 April 2020. Available at: https://kaks.fi/wp-content/uploads/2017/09/sote-jakuntarakenteen-pitka-kujanjuoksu_2.pdf

Valvira 2012. Vammaisten henkilöiden ympärivuorokautiset asumispalvelut. Valtakunnallinen valvontaohjelma 2012-2014 (24-hour residential services for persons with disabilities. National supervision program for 2012-2014) [E-publication]. Valvontaohjelmia 6:2012. Sosiaali- ja terveysalan lupa- ja valvontavirasto (Valvira). Helsinki. ISSN 2242-2587.

Valvira 2014. Vanhustenhuollon valtakunnallinen valvontaohjelma vuodelle 2014 (National supervision programme on care of the elderly for 2014) [E-publication]. Valvontaohjelmia 1:2014. Sosiaali- ja terveysalan lupa- ja valvontavirasto (Valvira). Helsinki. ISSN 2242-2587.

Valvira 2020a. National Supervisory Authority for Welfare and Health Valvira. National Supervisory Authority for Welfare and Health Valvira. Last accessed 15 April 2020. Available at: https://www.valvira.fi/web/en/valvira

Valvira 2020b. National Supervisory Authority for Welfare and Health Valvira. Healthcare. Last accessed 15 April 2020. Available at: https://www.valvira.fi/web/en/healthcare

Valvira 2020c. National Supervisory Authority for Welfare and Health Valvira. Social welfare. Last accessed 15 April 2020. Available at: https://www.valvira.fi/web/en/social_welfare

Valvira 2020d. National Supervisory Authority for Welfare and Health Valvira. Sosiaalihuolto. Sosiaalihuollon valvonta. (Social welfare. Supervision of social welfare.) Last accessed 15 April 2020. Available at: https://www.valvira.fi/sosiaalihuolto/sosiaalihuollon-valvonta

Valvira 2020e. National Supervisory Authority for Welfare and Health Valvira. Sosiaali- ja terveydenhuollon valtakunnallinen valvontaohjelma 2020-2023. (National programme for the supervision of social welfare and healthcare 2020-2023) [E-publication]. Last accessed 16 April 2020. Available at: https://www.valvira.fi/julkaisut-ja-maaraykset/valvontaohjelmat/sosiaali-_ja_terveydenhuolto

Valvira 2020f. National Supervisory Authority for Welfare and Health Valvira. Terveydenhuolto. Valvonta. (Healthcare. Supervision.) Last accessed 15 April 2020. Available at: https://www.valvira.fi/terveydenhuolto/valvonta

Valvira 2020g. National Supervisory Authority for Welfare and Health Valvira. Yksityisen sosiaalihuollon luvat. (Licensing of private social welfare.) Last accessed 15 April 2020. Available at: https://www.valvira.fi/sosiaalihuolto/yksityisen_sosiaalihuollon_luvat

Valvira 2020h. National Supervisory Authority for Welfare and Health Valvira. Yksityisen sosiaalihuollon luvat. Ilmoituksenvarainen toiminta. (Licensing of private social welfare. Operation subject to notification.) Last accessed 15 April 2020. Available at: https://www.valvira.fi/sosiaalihuolto/yksityisen_sosiaalihuollon_luvat/ilmoituksenvarainen_toiminta

Valvira 2020i. National Supervisory Authority for Welfare and Health Valvira. Yksityisen terveydenhuollon luvat. (Licensing of healthcare.) Last accessed 15 April 2020. Available at: https://www.valvira.fi/terveydenhuolto/yksityisen_terveydenhuollon_luvat/

Valvira 2020j. National Supervisory Authority for Welfare and Health Valvira. Yksityisen terveydenhuollon luvat. Luvan hakeminen. (Licensing of healthcare. Applying for a license.) Last accessed 15 April 2020. Available at: https://www.valvira.fi/terveydenhuolto/yksityisen_terveydenhuollon_luvat/luvan-hakeminen_luvat/

Van Elp, M., Konings, P. & Veuger, J. 2018. Investing in Healthcare Property in the Netherlands. In: Real Estate Finance Summer 2018, Vol. 35(1), pp. 72-82. ISSN 0748-318X.

Vargas-Silva, C. & Rienzo, C. 2019. The Migration Observatory. Migrants in the UK: An Overview. Last accessed 18 July 2020. Available at: https://migrationobservatory.ox.ac.uk/resources/briefings/migrants-in-the-uk-an-overview/

Volk, R & Laukkanen, T. 2007. Palvelusetelin käyttö kunnissa 2007 (Use of the service voucher in municipalities in 2007) Sosiaali- ja terveysministeriön selvityksiä 2007:38 [E-publication]. Last accessed 26 April 2020. Available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/73997/Selv200738.pdf?sequence=1&isAllowed=y

WasaGroup Funds 2020. Kaikki rahastot. (All funds.) Last assessed 20 July 2020. Available at: https://www.wasagroupfunds.fi/rahastot/kaikki-rahastot/

Worzala, E., Karofsky, J. F. & Davis, J. A. 2009. The Senior Living Property Sector: How is it Perceived by the Institutional Investor? The Journal of Real Estate Portfolio Management 2009, Vol.15(2), pp. 141-156. ISSN 1083-5547.

Wyatt, P. 2013. Property valuation. Property valuation in an economic context. 2nd ed. Chichester, West Sussex: Wiley-Blacwell. 474 p. ISBN 9781119968658.

Yin, R.K. 2009. Case Study Research: Design and Methods. 4th ed. SAGE Publications, Inc. 2019 p. ISBN 978-1-4129-6099-1.

Yiu, C. Y., Tang, B. S., Chiang, Y. H. & Choy, L. H. T. 2006. Alternative Theories of Appraisal Bias. Journal of Real Estate Literature 1 January 2006, Vol.14(3), pp. 321-344. ISSN 0927-7544.

YLE 2020. Helsinki ulkoistaa suuren terveysaseman ja hankkii lisäksi 20 000 kaupunkilaisen terveyspalvelut ulkoisena tuotantona. (City of Helsinki will outsource a large heathcare center and further deliver primary healthcare services for 20,000 residents through outsourced service provision) Yle News. Last accessed 30 June 2020. Available at: https://yle.fi/uutiset/3-11395558

Statutes:

Act on Disability Services and Assistance 380/1987

Act on Early Childhood Education and Care 540/2018

Act on Health and Social Service Vouchers 569/2009

Act on Interest Subsidy for Rental Housing Loans and Right of Occupancy Housing Loans 604/2001

Act on Private Social Services 922/2011

Act on Public Contracts and Concessions 1397/2016

Act on Special Care for Mentally Disabled Persons 519/1977

Act on Subsidies for Improving the Housing Conditions of Special Groups 2004/1281

Act on Supervision of Private Social Services 603/1996

Act on Supporting the Functional Capacity of the Older Population and on Social and Health Care Services for Older Persons 980/2012

Act on the Status and Rights of Patients 812/2000

Child Welfare Act 417/2007

Constitution of Finland 731/1999, inofficial translation by the Ministry of Justice

Health Care Act 1326/2010

Land Use and Building Act 132/1999

Lotteries Act 1047/2001

Ministry of the Environment Decree on Housing, Accommodation and Workspace Design 1008/2017

Private Healthcare Act 152/1990

Social Welfare Act 1301/2014

The Services and Assistance for the Disabled Act 380/1987

APPENDIX 1: Interview questions

Applicability of different valuation methods

- How well does market approach method apply when valuing care properties?
- How well does income approach method apply when valuing care properties?
- How well does cost approach method apply when valuing care properties?
- Are there other potential methods to be employed in care property valuation?
- Do the different valuation methods lead to a same market value?
- If there are differences in market values between valuation methods, what are the probable reasons for this?

Target group (the elderly, children, people with disabilities etc.)

- Does the target group (the user/occupier) of the care property affect valuation practices? If so, how?
- Are there major differences between different occupiers and users with respect to valuation practices?

Client / end user of the valuation

- Does the client or the end user of the valuation affect valuation practices? If so, how?
- Who are typical clients?

Purpose of the valuation

- Does the purpose of the valuation affect the valuation practices? If so, how?
- What are the typical purposes for which care properties are appraised?

Basis of value

- Is it possible to estimate a market value as defined in the IVS for care properties?
- Is there an alternative basis of value that would be more applicable?
- Does legislation and regulation affect the basis of value?

Assumptions

- What are the typical assumptions that take place when valuing care properties?
- Why is it necessary to make these assumptions?

Valuation process in general

- Does the valuation process of care properties differ from that of other property types? And if so, how?
- Does the available information favour the use of a certain valuation method?
- How important is location as a factor of value for care properties?
- What role does the age of the building play when valuing care properties?
- How significant are functionality and efficiency of the facilities?
- Are there any specific factors that complicate or impede care property valuation? If so, how are they accounted for?